Contaminant Information Sheets for the PCCL Chemicals Considered for CCL 3

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Contaminant Information Sheets for the PCCL Chemicals Considered for CCL 3

This File contains Contaminant Information Sheets for 561 chemical contaminants on the Preliminary Contaminant Candidate List (PCCL 3). These sheets summarize information about the chemicals that were considered during the analysis for the development of the final third Contaminant Candidate List (CCL 3). The sheets are in alphabetical order. The first 106 Information Sheets are for the chemicals on the final CCL 3. (Note: there are 104 chemical entries listed in the Federal Register Notice for the final CCL 3; cyanotoxins are listed as a group. In this file, there are information sheets on three individual cyanotoxins that were evaluated in the CCL 3 process (Anatoxin-a, Cylindrospermopsin, and Microcystin-LR)). Following the CCL 3 chemicals, the Information Sheets for the remaining 455 chemicals on the PCCL are presented in alphabetical order. Each information sheet is two pages in length. There is an index/bookmark in this PDF file that can be used to negotiate the file. The bookmarks are hyperlinked. You can find the contaminant name in the bookmark list, click on it, and the hyperlink will take you to that file.

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Contaminant:	1,1,1,2-Tetrachloroethane
Substance Key:	9105
Contaminant ID (CASRN):	630206

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	3	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 67.7 CAR HRL/NCOD R1 90%: 0.323

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.03	mg/kg-d	1987	Mineralization of the kidneys in males, hepatic clear cell change in females	Reference Dose; Basis LOAEL = 89.3 mg/kg-d (NTP 1983)
EPA HA RfD	0.03	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.03	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.1**	**mg/L**	**1989**		
RAISHE Slope Factor	0.026	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1989		
IARC Carcinogen Classification	3		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	1	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer	1	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	16,956	31	0.18	0.06	9.2	**0.59**	3.1	9.2	ug/L	
NCOD Round 2 finished water	24,127	51	**0.21**	0.2	18	0.5	1.55	18	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	4	0.09	0.011	0.0644	0.0275	0.0644	0.0644	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	2004	
TRI Release - surface water	36	lbs/yr	2	States	2004	
TRI Release - total	12,088	lbs/yr	7	States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 67.7	Cancer: 0.323		

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			
Use	Chemical intermediate (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60	days	BST	PBT; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	93-399	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.70E-03	atm-m^3/mol		
Water Solubility	1,100	mg/L		
% water PBT profiler	22			

Contaminant	1,1-Dichloroethane
Substance Key:	2647
Contaminant ID (CASRN):	75343

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	8	7	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 250 CAR HRL/NCOD R1 90%: 1.1

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.2	mg/kg-d	2001	Decreased body weight gain	Reference Dose; basis NOAEL 714 mg/kg-d, UF = 3,000; Muralidhara, et al, 2001.
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.0057**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification	C		1990		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	ug/L			
Health Reference Level (HRL)[2] cancer	6.14	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**20,483**	**233**	**1.14**	**0.01**	**500**	**1.2**	**5.6**	**27**	**ug/L**	
NCOD Round 2 finished water	24,808	184	0.74	0.0013	159	1	3.8	25	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,350	135	3.103	0.008	39	0.05	0.316	5.6	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	63	lbs/yr	3	States	2004	
TRI Release - total	17,368	lbs/yr	5	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 250				Cancer: 1.1				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>500K - 1M	lbs/yr	2002			
Use	Solvent (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	PBT; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	30	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.79	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.62E-03	atm-m3/mol		
Water Solubility	5040	mg/L		
% water PBT profiler	46			

Contaminant:	1,2,3-Trichloropropane
Substance Key:	3817
Contaminant ID (CASRN):	96184

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	3	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R2 90%: 2.1
CAR HRL/NCOD R2 90%: 0.00025

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.006	mg/kg-d	1987	Alterations in clinical chemistry & reduction in RBC mass	Reference Dose; NTP, 1983 ; rats; UF = 1,000; Basis NOAEL = 8 mg/kg-d
EPA HA RfD	0.006	mg/kg-d	2006		Reference Dose; F' 89
RAISHE RfD	0.006	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.06	mg/kg-d	1992	Hepatic	Minimal Risk Level; Int-MRL; UF = 100
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	5.71	mg/kg-d	1987		Supplemental Data; ITER NOAEL
RTECS Lowest Oral Chronic LOAEL	22.9	mg/kg-d		Kidney, Ureter, Bladder - changes in bladder weight, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other esterases	Lowest Observed Adverse Effect Level; 17 week oral study in rats; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-384,1993
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**7**	**$(mg/kg-d)^{-1}$**			**HEAST**
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART, RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.2	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	42	ug/L			
Health Reference Level (HRL)[2] cancer	0.005	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**17,392**	**44**	**0.25**	**0.1**	**112**	**0.92**	**6**	**112**	ug/L	
NCOD Round 2 finished water	24,088	19	0.079	0.03	3,000	0.5	20	3,000	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	43	1.0	0.05	2.92	0.4	0.97	2.92	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	282	lbs/yr	1	States	2004	
TRI Release - total	9,053	lbs/yr	2	States	2004	

Supplemental Water Data	Notes
Nominated data from NJDEP	NJ study: Detected in excess of health-based drinking water guidance value in 30 of 2,640 private wells and 11 of approximately 260 community water systems between 1999 and 2004 in NJ SOC Waiver Program sampling.

HRL Ratios (HRL/NCOD R2 90%)	Non-cancer: 2.1	Cancer: 0.00025

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>1M - 10M	lbs/yr	2002

Use	Paint ingredient (NTP)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	77-95	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.27	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.43E-04	atm-m^3/mol		
Water Solubility	1,750	mg/L		
% water PBT profiler	25			

Contaminant:	1,3-Butadiene
Substance Key:	4578
Contaminant ID (CASRN):	106990

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	10	9

3-model Categorical Prediction
L
HRL Ratio(s)
No Water Data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**3.4**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2A		1999		Vol. 71; 1999
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, IARC, CACART, OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen List	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.0103	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	493	lbs/yr	8	States	2004	
TRI Release - total	**1,964,956**	**lbs/yr**	**34**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Rubber chemical (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	7-28	days	BFA	BFA = biodegrades fast with acclimation
K_{OC}, Organic Carbon Partition Coefficient	288	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.99	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.40E-02	atm-m^3/mol		
Water Solubility	735	mg/L		
% water PBT profiler				

Contaminant:	1,3-Dinitrobenzene
Substance Key:	4045
Contaminant ID (CASRN):	99650

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0001**	**mg/kg-d**	**1988**	**Increased spleen weight**	**Reference Dose; Cody et al., 1981; Rats; UF = 3,000; Basis NOAEL = 0.4 mg/kg-d**
EPA HA RfD	0.0001	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.0001	mg/kg-d			Reference Dose; IRIS
ATSDR (ITER), MRL	0.0005	mg/kg-d	1995	Hemato.	Minimal Risk Level; Int-MRL; UF = 1,000
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.73	mg/kg-d		Endocrine - changes in spleen weight, Blood - methemoglobinemia-carboxyhemoglobin	Lowest Observed Adverse Effect Level; 90 day oral study in rats; TOXID9 Toxicologist. (Soc. of Toxicology, Inc., 475 Wolf Ledge Parkway, Akron, OH 44311) V.1- 1981- Volume(issue)/page/year 30,200,1996
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1991		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		male	CACART
EPAHA-DWEL	0.005	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	2	lbs/yr	1	States	2004	
TRI Release - total	**528,962**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Industrial chemical (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	150	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.49	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.90E-08	atm-m^3/mol		
Water Solubility	533	mg/L		
% water PBT profiler	37			

Contaminant:	1,4-Dioxane
Substance Key:	5539
Contaminant ID (CASRN):	123911

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	9	8

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/CAL DHS 90%: 92.1
CAR HRL/CAL DHS 90%: 0.395

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.1	mg/kg-d			Minimal Risk Level; ATSDR MRL-int = 0.6 mg/kg-d
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.3**	**mg/L**	**1987**		
RAISHE Slope Factor	0.011	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.027	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1987		
IARC Carcinogen Classification	2A	1999			
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; IARC; OEHHA; RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer	3	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	89,521	lbs/yr	7	States	2004	
TRI Release - total	**821,067**	**lbs/yr**	**22**	**States**	**2004**	

Supplemental water data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
CAL DHS	869	89	10.2	0.001	46.2	2.1	7.6	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 92.1				Cancer: 0.395				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			
Use	Solvent (NTP); solvent stabilizer					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.27	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.80E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant:	17 alpha-Estradiol
Substance Key:	81747
Contaminant ID (CASRN):	57910

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	9	3

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/Kolpin MAX: 4.7

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	**0.00005**	**mg/kg-d**	**1999**	**Estrogenic hormonal response in post-menopausal women**	**Acceptable Daily Intake for E2**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Kolpin, et al., 2002	**70**		**5.7**		**0.074**	**0.03**		**ug/L**	**National Surface Water Reconnaissance Kolpin, D.W., et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**

HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 4.7	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, hormone

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	3.9	mg/L		
% water PBT profiler	11			

Contaminant	1-Butanol
Substance Key:	2563
Contaminant ID (CASRN):	71363

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	10	10

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**	**1987**	**Hypoactivity, ataxia**	**Reference Dose; U.S. EPA, 1986; Basis NOAEL = 125 mg/kg-d, UF = 1,000; oral study in rats.**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.1	mg/kg-d			Reference Dose; IRIS
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.2	mg/kg-d		Behavioral - somnolence (general depressed activity)	Lowest Observed Adverse Effect Level; 30 day oral study in rats; TOLED5 Toxicology Letters. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1977- Volume(issue)/page/year 135,S122,2002
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1991		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	22,011	lbs/yr	20	States	2004	
TRI Release - total	**17,648,846**	**lbs/yr**	**44**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Paint solvent; chemical intermediate; food additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades Fast
K_{OC}, Organic Carbon Partition Coefficient	2.443	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.88	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.82E-06	atm-m3/mol		
Water Solubility	63200	mg/L		
% water PBT profiler				

Contaminant	2-Methoxyethanol
Substance Key:	4803
Contaminant ID (CASRN):	109864

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	7	9	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.003**	**mg/kg-d**		**Reproductive effects**	**Reference Dose; Unpublished NTP study - Gulati, et al, 1990.**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen / developmental, male	UMD / CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	14,390	lbs/yr	3	States	2004	
TRI Release - total	**153,774**	**lbs/yr**	**16**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>10M - 50M	lbs/yr	2002			

Use	Consumer products; synthetic Cosmetics, Perfumes, Fragrances, Hair Preparations, Skin Lotion (NTP)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades Fast with acclimation
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.77	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.30E-07	atm-m3/mol		
Water Solubility	1000000	mg/L		
% water PBT profiler				

Contaminant:	2-Propen-1-ol
Substance Key:	4596
Contaminant ID (CASRN):	107186

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	8	8

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.005**	**mg/kg-d**	**1987**	**Impaired renal function & increased relative liver, spleen & kidney weights**	**Reference Dose; Carpanini et al., 1978; Rat; UF = 1,000; Basis NOAEL = 4.8 mg/kg-d**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.005	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.5	mg/kg-d		Liver - liver function tests impaired, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Metabolism (Intermediary) - Plasma proteins not involving coagulation	Lowest Observed Adverse Effect Level; Rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,121,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	52	mg/kg		Details of toxic effects not reported other than lethal dose value	Rabbit; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0571508
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	10,971	lbs/yr	4	States	2004	
TRI Release - total	**604,872**	**lbs/yr**	**13**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			

Use	Manufacture of flavorings, perfumes; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	1.325	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.17	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.00E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant:	3-Hydroxycarbofuran
Substance Key:	25541
Contaminant ID (CASRN):	16655826

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	7	2	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R2 90%: 0.191

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00006**	**mg/kg-d**		**Inhibition of brain cholinesterase in pups - The RfD for the parent covers the toxicity of the metabolite**	**Reference Dose; Basis = $BMDL_{10}$ 0.03 mg/kg-d; UF = 500.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	7	mg/kg		Decreased body wt.	PCBPBS Pesticide Biochemistry and Physiology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1971- Volume(issue)/page/year 3,435,1973
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.42	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**12,700**	**18**	**0.14**	**1**	**66.3**	**2.2**	**2.2**	**66.3**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,539	1	0.022	0.07	0.07	0.07	0.07	0.07	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		0			ug/L	
PPMP finished water		1	0.4		0.062			ug/L	
HRL Ratios (HRL/NCOD R2 90%)	Non-cancer: 0.191				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Pesticide degradate					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	PBT; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	43			

Contaminant:	4,4'-Methylenedianiline
Substance Key:	4202
Contaminant ID (CASRN):	101779

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	7	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.08	mg/kg-d	1998	Intense liver degenerative lesions, hyperplasia of the stroma	Minimal Risk Level; MRL-Int; UF = 100
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	4.34	mg/kg-d		Liver - fatty liver degeneration, Kidney, Ureter, Bladder - interstitial nephritis, Blood - normocytic anemia	Lowest Observed Adverse Effect Level; 15 week oral study in dogs; JJATDK JAT, Journal of Applied Toxicology. (John Wiley & Sons Ltd., Baffins Lane, Chichester, W. Sussex PO19 1UD, UK) V.1- 1981- Volume(issue)/page/year 11,367,1991
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.25	$(mg/kg\text{-}d)^{-1}$			Slope factor withdrawn
OEHHA Slope Factor (oral)	**1.6**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1987		Vol. 39, Suppl. 7; 1987
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART, OEHHA, RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	560	ug/L			
Health Reference Level (HRL)[2] cancer	0.022	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	96,446	lbs/yr	2	States	2004	
TRI Release - total	**168,919**	**lbs/yr**	**10**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			

Use	Chemical intermediate; corrosion inhibitor; curing agent for polyurethanes (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	4,950	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.59	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.58E-11	atm-m^3/mol		
Water Solubility	1,000	mg/L		
% water PBT profiler				

Contaminant:	Acephate
Substance Key:	31325
Contaminant ID (CASRN):	30560191

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	10	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 1.17
CAR HRL/SWC EEC: 0.556

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0012**	**mg/kg-d**		**Brain ChE inhibition**	**Reference Dose; Basis = NOAEL 0.12 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.004	mg/kg-d	1989		Reference Dose; Basis = LOEL females = 0.15 mg/kg-d; LOEL males = 0.12 mg/kg-d; Adjusted Basis Value = LOAEL 0.0004 mg/kg-d
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.004	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d	1990		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	10	mg/kg-d		Brain and Coverings - other degenerative changes, Autonomic Nervous System - sympathomimetic, Biochemical - Metabolism (Intermediary) - amino acids (including renal excretion)	Lowest Observed Adverse Effect Level; ENVRAL Environmental Research. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1967- Volume(issue)/page/year 43,342,1987
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.4	mg/L			
RAISHE Slope Factor	0.0087	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1988	Liver	
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	8.4	ug/L			
Health Reference Level (HRL)[2] cancer	4	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**2,462,354**	**lbs/yr**	**35**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	20,751	lbs/yr	5	States	2004	

Supplemental Water Data			
OPP Estimated Environmental Concentration	Surface water chronic: 7.2 ug/L	Ground water chronic: 0.02 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 1.17	Cancer: 0.556	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	21.8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.85	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.02E-13	unitless		
Water Solubility	818,000	mg/L		
% water PBT profiler				

Contaminant	Acetaldehyde
Substance Key:	2622
Contaminant ID (CASRN):	75070

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/DBP ICR MED: 3.15

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**10**	**mg/kg-d**		**Behavioral - changes in motor activity (specific assay)**	**Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB234-882; 22-wk guinea pig study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1988		
IARC Carcinogen Classification	2B		1999		Vol. 36, Suppl. 7, Vol. 71; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, EPA, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	23.3	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	Mean value of Detects	Units for Mag data	Notes
DBP ICR	**236**	**27**	**11.44**		**18.3**	**7.4**	**8.04**	**ug/L**	

Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	370,815	lbs/yr	31	States	2004	
TRI Release - total	14,683,890	lbs/yr	38	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	8	3	37.5	1	24	2	4	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/DBP ICR MED)	Non-cancer: 3.15				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			

Use	Pesticide; food additive; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1.498	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.68E-05	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant:	Acetamide
Substance Key:	2411
Contaminant ID (CASRN):	60355

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	7	9

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.07**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.5	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	2,754	lbs/yr	3	States	2004	
TRI Release - total	**1,202,667**	**lbs/yr**	**7**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
	10K - 500K	lbs/yr	2002			

Use	Solvent; solubilizer; plasticizer; stabilizer (HSDB)

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	5	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.26	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.21E-08	atm-m^3/mol		
Water Solubility	2,250,000	mg/L		
% water PBT profiler	39			

Contaminant:	Acetochlor
Substance Key:	32393
Contaminant ID (CASRN):	34256821

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQ 90%: 179

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.02**	**mg/kg-d**	**1993**	**Salivation, increased ALT & ornithine carbamyl transferase; increases in triglyceride & decreased blood glucose levels; histopathological changes in kidneys & testes**	**Reference Dose; Basis NOAEL 2 mg/kg-d; UF = 100. ICI, Inc., 1988a**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic? NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	5.45	mg/kg-d		Brain and Coverings - other degenerative changes, Blood - methemoglobinemia-carboxyhemoglobin, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - dehydrogenases	Lowest Observed Adverse Effect Level; 42-day study in rat; PRKHDK Problemi na Khigienata. Problems in Hygiene. (Durzhavno Izdatel'stvo Meditsina i Fizkultura, Pl. Slaveikov 11, Sofia, Bulgaria) V.1- 1975- Volume(issue)/page/year 15,96,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,615**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	5,529	278	5.02	0.0011	30.4	0.032	0.784	8.49	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	32,591,175	lbs/yr	35	States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units	Notes
PPMP ambient water		115	35.6		0.334		0.002	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		69	30.3		0.395		0.061	ug/L	

	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
CAL DHS	1,872	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	848	293	34.55	0.026	21	0.022	1.5	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 179			Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	4.3	days	BF	BF = biodegrades fast (half-life is for soil)
K_{OC}, Organic Carbon Partition Coefficient	98.5-239	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.4E-11	atm-m^3/mol		
Water Solubility	233	mg/L		
% water PBT profiler	12			

Contaminant:	Acetochlor ethanesulfonic acid (ESA)
Substance Key:	79191
Contaminant ID (CASRN):	187022113

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	1

Scores based on parent

3-model Categorical Prediction
NL
HRL Ratio(s)
HRL/NAWQA 90%: 205 (NAWQA data for acetochlor - parent)

HEALTH EFFECTS DATA[1] - See Acetochlor Parent

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic? NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**23**	**mg/kg-d**		**Reduced body weights and body weight gains in both sexes**	**Supplemental Data; EPA OPP NOAEL - FOR ACETOCHLOR ESA**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	161	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data - FOR ACETOCHLOR - PARENT										
UCMR finished water	**3,615**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data - FOR ACETOCHLOR - PARENT										
NAWQA ambient water	5,529	278	5.020	0.0011	30.4	0.032	0.784	8.49	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	32,591,175	lbs/yr	35	States	1997	**FOR ACETOCHLOR - PARENT**
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data - FOR ACETOCHLOR ESA	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units	Notes
PDP finished water	377	5	1.3	0.02	0.02			ug/L	Pesticide Data Program (USDA); 2002

FOR ACETOCHLOR - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
CAL DHS	1,872	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	848	293	34.55	0.026	21	0.022	1.5	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 205	Cancer:	NAWQA data for acetochlor - parent

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide degradate

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Acetochlor oxanilic acid (OA)
Substance Key:	79193
Contaminant ID (CASRN):	194992444

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	1

Scores based on parent

3-model Categorical Prediction
NL
HRL Ratio(s)
HRL/NAWQA 90%: 205 (NAWQA data for acetochlor - parent)

HEALTH EFFECTS DATA[1] - See Acetochlor Parent

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic? NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**23**	**mg/kg-d**		**Reduced body weights and body weight gains in both sexes**	**Supplemental Data; EPA OPP NOAEL - FOR ACETOCHLOR OA**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	161	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data	**FOR ACETOCHLOR - PARENT**									
UCMR finished water	**3,615**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data	**FOR ACETOCHLOR - PARENT**									
NAWQA ambient water	5,529	278	5.02	0.0011	30.4	0.032	0.784	8.49	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	32,591,175	lbs/yr	35	States	1997	**FOR ACETOCHLOR - PARENT**
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental wate data FOR ACETOCHLOR - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
CAL DHS	1,872	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	848	293	34.55	0.026	21	0.022	1.5	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 205	Cancer:	NAWQA data for acetochlor - parent

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide degradate

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Acrolein
Substance Key:	4581
Contaminant ID (CASRN):	107028

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	3	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/NAWQA 90%: 1.03

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0005**	**mg/kg-d**	**2003**	**Decreased survival**	**Reference Dose; Basis = NOAEL 0.05 mg/kg-d; UF = 100. Parent, et. al, 1992a**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0005	mg/kg-d			Reference Dose (IRIS)
ATSDR (ITER), MRL	0.0005	mg/kg-d	12/1990	Hemato.	Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.5	mg/kg-d		Liver - liver function tests impaired, Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; 26-week study in rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,385,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1995		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3.5	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**1,108**	**2**	**0.18**	**1.3**	**3.4**	**2.35**	**3.4**	**3.4**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	1	lbs/yr	1	States	2004	
TRI Release - total	284,480	lbs/yr	16	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 1.03		Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			
Use	Aquatic herbicide; rodenticide; industrial chemical (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life	120-180	hours in water	BF	pH = 7; BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.01	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.22E-04	atm-m^3/mol		
Water Solubility	212,000	mg/L		
% water PBT profiler				

Contaminant:	Alachlor ethanesulfonic acid (ESA)
Substance Key:	71246
Contaminant ID (CASRN):	142363539

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	9	3

Scores based on parent

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 4,300 (NAWQA data for alachlor - parent)

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic? NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**157**	**mg/kg-d**		**Increased incidence of clinical signs of toxicity in males and females and decreased body weight gains in males.**	**Supplemental Data; EPA OPP - FOR ALACHLOR ESA**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.04	mg/L			FOR ALACHLOR - PARENT
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,100	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data - FOR ALACHLOR PARENT										
NAWQA ambient water	**7,166**	**568**	**7.9**	**0.0008**	**38.2**	**0.015**	**0.256**	**3.33**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data - FOR ALACHLOR ESA	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP finished water	79	3	3.8	0.50	0.50			ug/L	Pesticide Data Program (USDA); 2001
PDP finished water	233	76	32.6	0.02	1.44			ug/L	2002

FOR ALACHLOR - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	8,112	3	0.0003	0.24	14	4.29	11.09	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	2,111	361	17.1	0.0125	10.78	0.06	0.55	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 4,300	Cancer:	NAWQA data for alachlor - parent

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide degradate

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Alachlor oxanilic acid (OA)
Substance Key:	79196
Contaminant ID (CASRN):	171262172

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	9	3
Scores based on parent		Scores based on parent	

3-model Categorical Prediction
L?
HRL Ratio(s)
CAR HRL/NAWQA 90%: 1.56 (NAWQA data for alachlor - parent)

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic? NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.04**	**mg/L**			**FOR ALACHLOR - PARENT**
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.4	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data - FOR ALACHLOR PARENT										
NAWQA ambient water	**7,166**	**568**	**7.9**	**0.0008**	**38.2**	**0.015**	**0.256**	**3.33**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data - FOR ALACHLOR OA	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP finished water	137	1	0.07	0.50	0.50			ug/L	Pesticide Data Program (USDA); 2001
PDP finished water	411	21	5.1	0.121	0.392			ug/L	2002

FOR ALACHLOR - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	8,112	3	0.0003	0.24	14	4.29	11.09	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	2,111	361	17.1	0.0125	10.8	0.06	0.55	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer:	Cancer: 1.56	NAWQA data for alachlor - parent

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide degradate

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	alpha-Hexachlorocyclohexane
Substance Key:	6535
Contaminant ID (CASRN):	319846

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	4	3

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA 90%: 949 CAR HRL/NAWQA 90%: 0.102

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.008	mg/kg-d	9/2003	Hepatic	Minimal Risk Level; Basis NOAEL 0.8 mg/kg-d; UF = 100.
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.2	mg/kg-d		Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - hepatic microsomal mixed oxidase (dealkylation, hydroxylation, etc.), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - catalases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other oxidoreductases	Lowest Observed Adverse Effect Level; 30-day study in rat; TOLED5 Toxicology Letters. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1977- Volume(issue)/page/year 56,137,1991
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0006**	**mg/L**			
RAISHE Slope Factor	6.3	$(mg/kg\text{-}d)^{-1}$			IRIS
OEHHA Slope Factor (oral)	2.7	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	56	ug/L			
Health Reference Level (HRL)[2] cancer	0.006	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**7,119**	**21**	**0.295**	**0.0004**	**0.21**	**0.011**	**0.059**	**0.21**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 949	Cancer: 0.102	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Component of benzene hexachloride (BHC) former insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life	1.2	years	BST	hydrolysis only, pH = 7; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	641-1,995	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.70E-06	atm-m^3/mol		
Water Solubility	2	mg/L		
% water PBT profiler				

Contaminant:	Anatoxin-a
Substance Key:	80772
Contaminant ID (CASRN):	64285069

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	9	8

Scores based on supplemental data

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/Cyano HABs MAX: ~0.35

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value	**0.0005**	**mg/kg-d**	**2006**	**Mortality**	**Supplemental Data - draft RfD; Basis NOAEL 0.5 mg/kg-d. Astrachan, N.B. and B.G. Archer. 1981. Simplified monitoring of anatoxin-a by reverse-phase high performance liquid chromatography and the sub-acute effects of anatoxin-a in rats. In: The Water Environment: Algal Toxins and Health, W.W. Carmichael, Ed. Plenum Press, New York, NY. p. 437-446. Astrachan, N.B., B.G. Archer and D.R. Hilbelink. 1980. Evaluation of the subacute toxicity and teratogenicity of anatoxin-a. Toxicon. 18(5-6):684-688.**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3.5	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
Prev: UCMR 1 Meeting summary; Mag: CyanoHABs - The Florida Experience			**4**		**~10**			**ug/L**	**Prev: Lake Champlain, NY study; Mag: 2000 Florida study**

HRL Ratios (HRL/CyanoHABs MAX)	Non-cancer: ~0.35	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Cyanobacterial toxin					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Aniline
Substance Key:	2438
Contaminant ID (CASRN):	62533

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	9	8

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.007**	**mg/kg-d**		**Blood- effects; Spleen-effects**	**Reference Dose; Provisional value; 104-week chronic study in rat for aniline hydrochloride. CIIT, 1982.**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.007	mg/kg-d	1993	spleen	Tolerable Daily Intake; CIIT,1982; Basis LOAEL 7.2 mg/kg-d; rat; UF = 1,000
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.5	mg/kg-d		Blood - pigmented or nucleated red blood cells, Blood - methemoglobinemia-carboxyhemoglobin, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other esterases	Lowest Observed Adverse Effect Level; 12 week oral study in rats; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 24(7),44,1959
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.6	mg/L			
RAISHE Slope Factor	0.0057	$(mg/kg\text{-}d)^{-1}$			from IRIS
OEHHA Slope Factor (oral)	0.0057	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2			spleen	
IARC Carcinogen Classification	3		1987		Vol. 27, Suppl. 7; 1987
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, CACART, OEHHA, RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	49	ug/L			
Health Reference Level (HRL)[2] cancer	6	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	1,903	lbs/yr	7	States	2004	
TRI Release - total	**937,263**	**lbs/yr**	**20**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Industrial chemical; as solvent; synthesis of explosives, rubber accelerators, isocyanates (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades Fast
K_{OC}, Organic Carbon Partition Coefficient	44.78	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.9	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.02E-06	atm-m3/mol		
Water Solubility	36000	mg/L		
% water PBT profiler				

Contaminant:	Bensulide
Substance Key:	9553
Contaminant ID (CASRN):	741582

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 0.224

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.005**	**mg/kg-d**		**Plasma & brain ChE inhibition, decreased body weight gain**	**Reference Dose; Basis = NOAEL 0.5 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	271	mg/kg		Details of toxic effects not reported other than lethal dose value	FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C42,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**545,406**	**lbs/yr**	**34**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data						
OPP Estimated Environmental Concentration	Surface water chronic: 158 ug/L			Ground water chronic: 1 ug/L		
HRL Ratios (HRL/SWC EEC)	Non-cancer: 0.224			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	PBT; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.15E-09	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	15			

Contaminant:	Benzyl chloride
Substance Key:	4107
Contaminant ID (CASRN):	100447

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	26.6	mg/kg-d		Cardiac - other changes, Gastrointestinal - necrotic changes, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; JJIND8 JNCI, Journal of the National Cancer Institute. (Washington, DC) V.61-79, 1978-87. For publisher information, see JNCIEQ. Volume(issue)/page/year 76,1231,1986; 26 week oral study in rats
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.02**	**mg/L**			
RAISHE Slope Factor	0.17	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.17	$(mg/kg\text{-}d)^{-1}$			2B from IARC
EPA Carcinogen classification	B2		1989	Thyroid	Lijinsky, 1986
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART, EPA, RAIS, OEHHA, IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	62	ug/L			
Health Reference Level (HRL)[2] cancer	0.2	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	259	lbs/yr	3	States	2004	
TRI Release - total	**18,750**	**lbs/yr**	**10**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., 2006	12	0	0	Not Detected	Not Detected	Not Detected	Not Detected		Krasner, et al., 2006. Env. Sci. & Technol., 40(23), pp. 7175-7185.

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M - 100M	lbs/yr	1998			
	>50M - 100M	lbs/yr	2002			
Use	Chemical intermediate (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	517.8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.11E-04	atm-m^3/mol		
Water Solubility	20	mg/L		
% water PBT profiler	27			

Contaminant	Butylated hydroxyanisole
Substance Key:	28160
Contaminant ID (CASRN):	25013165

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	8	4

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NREC NA GW MED: 0.484
CAR HRL/NREC NA GW MED: 146

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.249**	**mg/kg-d**	**1959**	**Liver - changes in liver weight**	**Lowest Observed Adverse Effect Level; AJEBAK Australian Journal of Experimental Biology and Medical Science. (Adelaide, S.A., Australia) V.1-64, 1924-86. Volume(issue)/page/year 37,533,1959**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.0002	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				Vol. 40, Suppl. 7, 1987
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.581	ug/L			
Health Reference Level (HRL)[2] cancer	175	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water	**85**	**2**	**2.4**			**0.1**			**ug/L**	**National Reconnaissance**
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water			3			0.2			ug/L	National Aggregate
NREC ambient ground water			0.61			1.2			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
Kolpin, et al., 2002					0.2			ug/L	National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.
Focazio, et al., 2008					Not detected			ug/L	A national reconnaissance for pharmaceuticals and other organic wastewater contaminants in the United States -- II. Untreated drinking water sources. Focazio, et al., 2008. Sci. Tot. Env., 402(2-3), pp. 201-216.

HRL Ratios (HRL/NREC NA GW MED)	Non-cancer: 0.484	Cancer: 146

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Food additive (antioxidant) (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,390	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.17E-06	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	15			

Contaminant:	Captan
Substance Key:	5825
Contaminant ID (CASRN):	133062

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	8	10	8

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/SWC EEC: 84.3 **CAR HRL/SWC EEC: 1.35**

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.13	mg/kg-d	1999	Decreased pup body weight	Reference Dose; Basis = NOEL 12.5 mg/kg-d; UF = 100
EPA IRIS (ITER) RfD		mg/kg-d			
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.13	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.1	mg/kg-d	1995		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	19.9	mg/kg-d		Kidney, Ureter, Bladder - other changes in urine composition, Blood - pigmented or nucleated red blood cells, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 38(9),24,1973
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.0024**	**$(mg/kg-d)^{-1}$**			
RAISHE Slope Factor	0.0035	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)	0.0023	$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; OEHHA; RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	910	ug/L			
Health Reference Level (HRL)[2] cancer	14.6	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**3,992,782**	**lbs/yr**	**39**	**States**	**1997**	
TRI Release - surface water	15	lbs/yr	3	States	2004	
TRI Release - total	2,938	lbs/yr	6	States	2004	

Supplemental Water Data						
OPP Estimated Environmental Concentration	Surface water chronic: 10.8 ug/L			Ground water chronic: 0 ug/L		
HRL Ratios (HRL/SWC EEC)	Non-cancer: 84.3			Cancer: 1.35		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades Sometimes/Recalcitrant. However, hydrolysis half-life is 4.9 hrs - 18.8 hrs @ pH 7 and 5, respectively.
K_{OC}, Organic Carbon Partition Coefficient	862.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.01E-09	atm-m^3/mol		
Water Solubility	5.1	mg/L		
% water PBT profiler				

Contaminant:	Chlorate
Substance Key:	24376
Contaminant ID (CASRN):	14866683

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/DBP ICR 90%: 0.656

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.03**	**mg/kg-d**		**Thyroid hypertrophy and mineralization**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	5	mg/kg-d	2005	Bone marrow hyperplasia; thyroid folicular hypertrophy and mineralization	Supplemental Data - NTP Abstract for TR-517; 2-year rat study for sodium chlorate
RTECS Lowest Oral Chronic LOAEL	1.4	mg/kg-d		Blood - pigmented or nucleated red blood cells, Blood - changes in erythrocyte (RBC) count, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 1-year oral rat study fopr sodium chlorate; Journal of Environmental Pathology, Toxicology and Oncology. (Chem-Orbital, POB 134, Park Forest, IL 60466) V.5(4)- 1984- Volume(issue)/page/year
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	Not likely to be carcinogenic at doses that do not alter thyroid				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	
DBP ICR finished water	**1,719**	**1,490**	**86.7**	**172**	**2,234**	**120**	**320**		**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	7,261,557	lbs/yr	16	States	1997	For sodium chlorate
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Median of Detects	Maximum of Detects	Units for Mag data	Notes
CAL DHS	116	66	56.9	110	747	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/DBP ICR 90%)	Non-cancer: 0.656	Cancer:	

Production	Amount Range	Units	Year	
CUSIUR Production Data		lbs/yr	1998	
		lbs/yr	2002	
Use	Agricultural defoliant or desiccant and in the production of ClO_2 (HSDB).			

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		days		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		cm3/g		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		For sodium chlorate
% water PBT profiler				

Contaminant	Chloromethane (Methyl chloride)
Substance Key:	2605
Contaminant ID (CASRN):	74873

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	8	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/NCOD R1 90%: 2.15
CAR HRL/NCOD R1 90%: 0.207

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	0.004	mg/kg-d	2006	Mild neurological effects in humans occupationally exposed to chloromethane	Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.013**	**$(mg/kg\text{-}d)^{-1}$**	**1981**		**CIIT, 1981**
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		2001		
IARC Carcinogen Classification	3		1999		Vol. 41, Suppl. 7, Vol. 71; 1999
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N		developmental	CACART, RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.1	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28	ug/L			
Health Reference Level (HRL)[2] cancer	2.69	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	20,246	248	1.22	0.01	550	**1.9**	13	120	ug/L	
NCOD Round 2 finished water	23,478	528	**2.25**	0.00073	312	1.4	5	29	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	3,959	356	8.99	0.007	21	0.04	0.1	0.58	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	1,539	lbs/yr	10	States	2004	
TRI Release - total	1,733,197	lbs/yr	26	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,984	247	2.1	0.25	46	0.7	2	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
Krasner et al., 2006	12	1	8			ND		ug/L	Krasner, et al., 2006. Env. Sci. & Technol., 40(23), pp. 7175-7185.
HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 2.15				Cancer: 0.207				

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Foaming agent; in organic synthesis (HSDB); naturally-occurring gas					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient	14	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.91	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.82E-03	atm-m3/mol		
Water Solubility	5320	mg/L		
% water PBT profiler	43			

Contaminant:	Clethodim
Substance Key:	76719
Contaminant ID (CASRN):	110429624

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	10	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 9.21

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.01**	**mg/kg-d**		**Increased liver weights increased liver enzymes and liver histopathology**	**Reference Dose; Basis = NOEL 1 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.01	mg/kg-d	1999		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,360	mg/kg		Details of toxic effects not reported other than lethal dose value	Oral study in rat; FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C272,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**670,721**	**lbs/yr**	**39**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data:

OPP Estimated Environmental Concentration	Surface water chronic: 7.6 ug/L	Ground water chronic: 0.49 ug/L

HRL Ratios (HRL/SWC EEC)	Non-cancer: 9.21				Cancer:	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide; pesticide degradate					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Cobalt
Substance Key:	18870
Contaminant ID (CASRN):	7440484

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	4	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NIRS 90%: 6.67

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	**0.01**	**mg/kg-d**	**2004**	**Blood-increased hemoglobin, polycythemia; respiratory-effects on lung function**	**Minimal Risk Level; MRL-Int; UF = 100**
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.0014	mg/kg-d	2000	Heart	Tolerable Daily Intake; 'multiple studies as cited in ATSDR, 1992; UF = 30; human study; RIVM; Basis LOAEL = 0.04 mg/kg-d
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1991		Vol. 52; 1991; NB: Evaluated as a group; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**3**	**0.303**	**6.4**	**10.6**	**9.7**	**10.5**	**10.6**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water	3,297	782	23.7	0.007	684	0.22	3.91	53.2	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	1,272	lbs/yr	17	States	2004	
TRI Release - total	786,491	lbs/yr	38	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 6.67			Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Use data are for cobaltous chloride: Formerly in medicines; as germicide (HSDB); naturally-occurring

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; All use and env. fate data are for cobaltous chloride; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		unitless		
Water Solubility	534,200	mg/L		
% water PBT profiler				

Contaminant	Cumene hydroperoxide
Substance Key:	2927
Contaminant ID (CASRN):	80159

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	8

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**32.7**	**mg/kg-d**		**Mortality**	**Lowest Observed Adverse Effect Level; AIHAAP American Industrial Hygiene Association Journal. (AIHA, 475 Wolf Ledges Pkwy., Akron, OH 44311) V.19- 1958- Volume(issue)/page/year 19,205,1958; 7 week oral study in rats**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	382	mg/kg			Oral study in rats
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	76.4	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	96	lbs/yr	1	States	2004	
TRI Release - total	**443,772**	**lbs/yr**	**15**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			
Use	Industrial chemical (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades Slowly with Acclimation; PBT
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.71E-08	atm-m3/mol		
Water Solubility	13,900	mg/L		
% water PBT profiler	25			

Contaminant:	Cylindrospermopsin
Substance Key:	81115
Contaminant ID (CASRN):	143545908

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	3	5	10

Scores based on supplemental data
Default Prevalence score based on related cyanotoxin surveys

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/CyanoHABs MAX: ~0.0021

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value	**0.00003**	**mg/kg-d**	**2006**	**Increased kidney weight**	**Supplemental Data - draft RfD; Basis LOAEL 60 ug/kg-d; NOAEL 3 ug/kg-d. Humpage, A.R. and I.R. Falconer. 2003. Oral toxicity of the cyanobacterial toxin cylindrospermopsin in male Swiss albino mice: Determination of no observed adverse effect level for deriving a drinking water guideline value. Environ. Toxicol. 18(2):94-103.**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.21	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CyanoHABs - The Florida Experience			**Not Available**		**~100**			**ug/L**	**2000 Florida study**
UCMR 1 Meeting summary			**Not Available**		**90**			**ug/L**	**Florida survey**

HRL Ratios (HRL/CyanoHABs MAX)	Non-cancer: ~0.0021	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Cyanobacterial toxin

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Dicrotophos
Substance Key:	6098
Contaminant ID (CASRN):	141662

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	5	8	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 2.45

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00007**	**mg/kg-d**		**Decreased plasma, RBC & brain ChE activity**	**Reference Dose; Basis = LOAEL 0.02 mg/kg-d; UF = 300.**
EPA IRIS (ITER) RfD	0.0001	mg/kg-d	1986	Decreased body weight	Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0001	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	11	mg/kg		Details of toxic effects not reported other than lethal dose value	GUCHAZ Guide to the Chemicals Used in Crop Protection. (Information Canada, 171 Slater St., Ottawa, Ont., Canada) Volume(issue)/page/year 6,196,1973
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	Suggestive evidence				OPP; no quantification
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.49	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**359,726**	**lbs/yr**	**13**	**States**		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		0		0	ug/L	Pesticide Pilot Montoring Program (USGS/EPA); 2002
PPMP finished water		0	0		0		0	ug/L	2002

OPP Estimated Environmental Concentration	Surface water chronic: 0.2 ug/L	Ground water chronic: 0.005 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 2.45	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time	BS	PBT; BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient	366.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.49	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.05E-11	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	39			

Contaminant:	Dimethipin
Substance Key:	36818
Contaminant ID (CASRN):	55290647

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/GWC EEC: 1.55

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0218**	**mg/kg-d**	**1986**	**Kidney, lungs, duodenum, liver, glandular stomach, heart, aortic artery & testes toxicity. Decreased body weight gain.**	**Reference Dose; Basis = NOEL 2.18 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.02	mg/kg-d		Increased absolute and relative liver weight	Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d	1999		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1987		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	153	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**282,458**	**lbs/yr**	**14**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	250	lbs/yr	1	States	2004	

Supplemental Water Data						
OPP Estimated Environmental Concentration	Surface water chronic: 7.3 ug/L				Ground water chronic: 99 ug/L	
HRL Ratios (HRL/GWC EEC)	Non-cancer: 1.55				Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide; plant growth regulator (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = biodegrades slowly with acclimation; PBT
K_{OC}, Organic Carbon Partition Coefficient	27.41	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.17	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.30E-11	atm-m^3/mol		
Water Solubility	4,600	mg/L		
% water PBT profiler	46			

Contaminant:	Dimethoate
Substance Key:	2413
Contaminant ID (CASRN):	60515

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	10	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 0.655

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0022**	**mg/kg-d**	**2007**	**Brain cholinesterase inhibition**	**Reference Dose; OPP RED**
EPA IRIS (ITER) RfD	0.0002	mg/kg-d	1988	Brain cholinesterase inhibition	Reference Dose; Basis NOEL 0.05 mg/kg-d; UF = 100. American Cyanamid Co., 1986a
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0002	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.002	mg/kg-d	1996		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	3	mg/kg-d		Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level - 52-week study in rat; BJIMAG British Journal of Industrial Medicine. (British Medical Journal, Box 560B, Kennebunkport, ME 04046) V.1- 1944- Volume(issue)/page/year 21,52,1964
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		2006		OPP
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	15.4	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,896,947**	**lbs/yr**	**44**	**States**	**1997**	
TRI Release - surface water	2,615	lbs/yr	2	States	2004	
TRI Release - total	31,480	lbs/yr	4	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		4	1.3		0.022			ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water								ug/L	

	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,238	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	890	14	1.57	0.055	0.21	0.148	0.198	ug/L	

OPP Estimated Environmental Concentration		Surface water chronic: 23.5 ug/L			Ground water chronic: 0.044 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 0.655			Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Pesticide (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	8	weeks	BSA	BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	5.2-36	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.43E-10	atm-m^3/mol		
Water Solubility	23,800	mg/L		
% water PBT profiler	36			

Contaminant:	Disulfoton
Substance Key:	6423
Contaminant ID (CASRN):	298044

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	5	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 1.1

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00013**	**mg/kg-d**	**2002**	**Plasma, RBC, brain & corneal ChE inhibition**	**Reference Dose; Basis = NOAEL 0.013 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.00004	mg/kg-d	1986		Reference Dose; Basis = LOAEL 0.04 mg/kg-d; UF = 1,000.
EPA HA RfD	0.0001	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.00004	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.00006	mg/kg-d	08/1995		Minimal Risk Level
JMPR, maximum ADI	0.0003	mg/kg-d	1991		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.06	mg/kg-d		Brain and Coverings - other degenerative changes, Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; FAATDF Fundamental and Applied Toxicology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1-40, 1981-97. For publisher information, see TOSCF2 Volume(issue)/page/year 35,101,1997
Supplemental LOAEL		mg/kg-d			Supplemental Data, ITER
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	E				Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.0035	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.91	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	7,118	17	0.24	0.002	3.81	0.02	0.826	3.81	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	1,196,066	lbs/yr	33	States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		Not Detected		Not Detected		Pesticide Pilot Montoring Program (USGS/EPA); 2002
PPMP finished water		0	0		Not Detected		Not Detected		2002
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 1.1				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	7-41	days	BS	BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient	684-14,013	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.02	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.20E-06	atm-m^3/mol		
Water Solubility	16.3	mg/L		
% water PBT profiler	17			

Contaminant:	Diuron
Substance Key:	6583
Contaminant ID (CASRN):	330541

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	4	4	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/UCMR 90%: 10 CAR HRL/UCMR 90%: 0.871

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.003**	**mg/kg-d**		**Hemolytic anemia & compensatory hematopotesis (decreased erythrocyte count, hemoglobin level, etc).**	**Reference Dose; du Pont, 1964a; Basis = LOAEL 1.0 mg/kg-d; UF = 300.**
EPA IRIS (ITER) RfD	0.002	mg/kg-d	1987		Reference Dose; Basis NOEL 0.625 mg/kg-d
EPA HA RfD	0.003	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.002	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.75	mg/kg-d		Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Liver - changes in liver weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; 30-day study in rat; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 36,76,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
EPA OPP Slope Factor	0.0191	$(mg/kg\text{-}d)^{-1}$	2003		
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	Known/Likely		2003		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.1	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	ug/L			
Health Reference Level (HRL)[2] cancer	1.83	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**298**	**1**	**0.34**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,552	319	7.00	0.0004	23.3	0.09	0.915	8.4	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	4,370,448	lbs/yr	39	States	1997	
TRI Release - surface water	10	lbs/yr	2	States	2004	
TRI Release - total	798	lbs/yr	5	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units	Notes
PDP finished water	270	1	0.4	0.058	0.058			ug/L	
PPMP ambient water		117	37.5		0.54		0.319	ug/L	Pesticide Data Program (USDA); 2002
PPMP finished water		13	5.8		0.079		0.079	ug/L	

HRL Ratios (HRL/UCMR 90%)	Non-cancer: 10	Cancer: 0.871	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB			
Environmental Fate Parameters	**Value**	**Units**	**Degradation code**	**Notes**
$T_{1/2}$, Half life		months	BST	BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	224-879	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.68	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.8E-10	atm-m^3/mol		
Water Solubility	36.4	mg/L		
% water PBT profiler	15			

Contaminant:	Equilenin
Substance Key:	81750
Contaminant ID (CASRN):	517099

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	9	5

3-model Categorical Prediction
L?-L
HRL Ratio(s)
NC HRL/Kolpin MAX: 1.26

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	**0.00005**	**mg/kg-d**	**1999**	**Estrogenic hormonal response in post-menopausal women**	**Acceptable Daily Intake for E2**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Kolpin, et al., 2002	**70**		**2.8**		**0.278**	**0.14**		**ug/L**	**National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**
HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 1.26				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, hormone			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		days		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.93	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1.52	mg/L		
% water PBT profiler				

Contaminant:	Equilin
Substance Key:	81748
Contaminant ID (CASRN):	474862

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	8	5

3-model Categorical Prediction
L?-L
HRL Ratio(s)
NC HRL/Kolpin MAX: 2.38

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	**0.00005**	**mg/kg-d**	**1999**	**Estrogenic hormonal response in post-menopausal women**	**Acceptable Daily Intake for E2**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Kolpin, et al., 2002	**70**		**1.4**		**0.147**	**0.147**		**ug/L**	**National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**

HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 2.38	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, hormone

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.35	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1.41	mg/L		
% water PBT profiler	13			

Contaminant:	Erythromycin
Substance Key:	75632
Contaminant ID (CASRN):	114078

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	10	4

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NREC MAX: 2.88

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	**0.0007**	**mg/kg-d**	**2006**	**Inhibition of beneficial gastrointestinal bacteria**	**Acceptable Daily Intake**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	66.7	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4.9	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water	**104**	**22**	**21.5**		**1.7**	**0.1**			**ug/L**	**National Reconnaissance**
NREC ambient ground water	90	0	0.0	Not detected	Not detected	Not detected	Not detected	Not detected	ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Focazio, et al., 2008					0.3			ug/L	Drinking water monitoring; Focazio, et al., 2008. Sci.Tot. Env. 402(2-3), pp. 201-216.

HRL Ratios (HRL/NREC MAX)	Non-cancer: 2.88	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, antibiotic

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180	days	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.06	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.20E-29	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	6			

Contaminant:	Estradiol (17-beta estradiol)
Substance Key:	2130
Contaminant ID (CASRN):	50282

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	10	5

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/Kolpin MAX: 1.75 **CAR HRL/Kolpin MAX: 0.0045**

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	0.00005	mg/kg-d	1999	Estrogenic hormonal response in post-menopausal women	Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**39**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification	1				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART, OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer	0.0009	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Snyder, et al., 2007			0.0	Not detected	Not detected	Not detected	Not detected	ug/L	Finished Drinking Water; Snyder, et al, 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Snyder, et al., 2007					0.0064			ug/L	Raw Drinking Water; Snyder, et al, 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Kolpin, et al., 2002	**85**		**10.6**		**0.2**	**0.16**		**ug/L**	**National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**

HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 1.75	Cancer: 0.0045

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, hormone

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.01	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.40E-11	atm-m^3/mol		
Water Solubility	3.6	mg/L		
% water PBT profiler	11			

Contaminant:	Estriol
Substance Key:	75525
Contaminant ID (CASRN):	50271

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	10	3

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/Kolpin MAX: 6.86

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	**0.00005**	**mg/kg-d**	**1999**	**Estrogenic hormonal response in post-menopausal women**	**Acceptable Daily Intake for E2**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Snyder, et al., 2007			0.0	Not detected	Not detected	Not detected	Not detected	ug/L	Finished Drinking Water; Snyder, et al, 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Snyder, et al., 2007			0.0	Not detected	Not detected	Not detected	Not detected	ug/L	Raw Drinking Water; Snyder, et al, 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Kolpin, et al., 2002	**70**		**21.4**		**0.051**	**0.019**		**ug/L**	**National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**

HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 6.86	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, hormone			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.45	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.33E-12	atm-m^3/mol		
Water Solubility	441	mg/L		
% water PBT profiler	17			

Contaminant:	Estrone
Substance Key:	2210
Contaminant ID (CASRN):	53167

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	9	3

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/Swartz MAX: 2.92

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JECFA ADI	**0.00005**	**mg/kg-d**	**1999**	**Estrogenic hormonal response in post-menopausal women**	**Acceptable Daily Intake for E2**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Boyd, et al., 2003				Not detected	Not detected	Not detected	Not detected		Finished Drinking Water; Boyd, et al, 2003. Sci. Tot. Env. 311(1-3): pp. 135-149.
Snyder, 2008					0.002			ug/L	Raw Drinking Water; Snyder, et al, 2008. Removal of Endocrine Disruptors and Pharmaceuticals during Water Treatment. In: Fate of Pharmaceuticals in the Environmental and in Water Treatment Systems.
Kolpin, et al., 2002	**70**		**7.1**		**0.112**	**0.027**		**ug/L**	**National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**
Swartz, et al., 2006					0.12			ug/L	Ambient Water (SW/GW); Swartz, et al., 2006. Env. Sci. & Technol. 40(16): pp. 4894-4902.
HRL Ratios (HRL/Swartz MAX)	Non-cancer: 2.92				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	**Pharmaceutical, hormone**					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.13	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.80E-10	atm-m^3/mol		
Water Solubility	30	mg/L		
% water PBT profiler	13			

Contaminant:	Ethinyl Estradiol (17-alpha ethynyl estradiol)
Substance Key:	2327
Contaminant ID (CASRN):	57636

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	3	10	4

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/Kolpin MAX: 0.337

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOAEL	0.04	mg/kg-d	2001	Hematalogical effects	Supplemental Data; Maier and Hermann, 2001. Regulatory Toxicology and Pharmacology, 34, pp 53-61.
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**0.015**	**mg/kg-d**	**1981**	**Increased serum levels of alanine aminotransferase (ALT), aspartate aminotransferase (AST) and γ-glutamultransferase (GGT).**	**Supplemental Data; Tennant, et al., 1981 as cited in Maier and Hermann, 2001.**
Supplemental LOAEL	0.0005	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.28	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects (ug/L)	Maximum value of Detects (ug/L)	Median value of Detects (ug/L)	90% of Detects (ug/L)	Units for Mag data	Notes
Snyder, et al., 2007			0.0	Not detected	Not detected	Not detected	Not detected	ug/L	Finished Drinking Water; Snyder, et al., 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Snyder, et al., 2007			0.0	Not detected	Not detected	Not detected	Not detected	ug/L	Raw Drinking Water; Snyder, et al., 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Kolpin, et al., 2002	**70**		**5.7**		**0.273**	**0.094**		**ug/L**	**Response to Comment on National Surface Water Reconnaissance Kolpin et al., 2002: Env. Sci. & Technol., 36(18), pp. 4007-4008.**

HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 0.337	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical, hormone

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60	days	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.67	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.94E-12	atm-m^3/mol		
Water Solubility	11.3	mg/L		
% water PBT profiler	9			

Contaminant:	Ethoprop
Substance Key:	22682
Contaminant ID (CASRN):	13194484

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	7	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 7.29 CAR HRL/NAWQA 90%: 13

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0001**	**mg/kg-d**		**Plasma ChE inhibition, Q1* 0.0281 (mg/kg-day)-1 - Likely.**	**Reference Dose; Basis = NOAEL 0.01 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.0004	mg/kg-d	1999		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	33	mg/kg		Behavioral - changes in motor activity (specific assay), Behavioral - muscle contraction or spasticity	HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 1,693,2001
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.12	mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor (oral)	0.0281	$(mg/kg-d)^{-1}$			OPP RED and Ethoprop pesticide tolerances: 73 FR 53725, Spetember 17, 2008
EPA Carcinogen classification	Likely				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	ug/L			
Health Reference Level (HRL)[2] cancer	1.25	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**7,118**	**84**	**1.18**	**0.002**	**1.95**	**0.011**	**0.096**	**0.8**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	1,010,807	lbs/yr	28	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	77,786	lbs/yr	4	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		Not Detected		Not Detected	ug/L	Pesticide Pilot Montoring Program (USGS/EPA); 2001
PPMP finished water		0	0		Not Detected		Not Detected	ug/L	2001
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 7.29				Cancer: 13				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	75-133	days	BST	hydrolysis only: BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	70-120	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.59	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.70E-07	atm-m^3/mol		
Water Solubility	750	mg/L		
% water PBT profiler				

Contaminant:	Ethylene glycol
Substance Key:	4599
Contaminant ID (CASRN):	107211

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	9	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**2**	**mg/kg-d**	**1987**	**Kidney toxicity. Increased mortality, neutrophil count, kidney hemoglobin & hematocrit, chronic nephritis**	**Reference Dose; DePass et al., 1986a; UF = 100; Rat; Basis NOAEL = 200 mg/kg-d**
EPA HA RfD	2	mg/kg-d	2006		Reference Dose
RAISHE RfD	2	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.8	mg/kg-d	2007	Increased total malformations and incidence of extra rib 14 in developmental study	Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.05	mg/kg-d	2000	Kidney	Tolerable Daily Intake; Gaunt et al., 1974; UF = 1,000; Rat
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	600	mg/kg-d		Behavioral - fluid intake, Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis), Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 2 year oral study in rats; FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 3,229,1965
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1987		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	70	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14,000	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	576,990	lbs/yr	31	States	2004	
TRI Release - total	**10,076,483**	**lbs/yr**	**49**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Antifreeze; cancelled pesticide; synthetic chemical used in textile manufacture (NTP)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.36	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.00E-08	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant:	Ethylene Oxide
Substance Key:	2635
Contaminant ID (CASRN):	75218

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	10	8

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	1.02	$(mg/kg\text{-}d)^{-1}$			HEAST
OEHHA Slope Factor (oral)	**0.31**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification	1		1994		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAIS; OEHHA; EPA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen; Developmental	UMD; CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.113	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	4,761	lbs/yr	4	States	2004	
TRI Release - total	**374,110**	**lbs/yr**	**38**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Fumigant (NTP); gas					

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life		length of time	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	1.435	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.48E-04	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	43			

Contaminant:	Ethylene thiourea
Substance Key:	3836
Contaminant ID (CASRN):	96457

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	4	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/GWC EEC: 6.67 CAR HRL/GWC EEC: 0.286

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0002**	**mg/kg-d**		**Thyroid toxicity**	**Reference Dose**
EPA IRIS (ITER) RfD	0.00008	mg/kg-d	1991	Increased incidence of thyroid hyperplasia	Reference Dose; Basis LOAEL 0.25 mg/kg-d. Graham et al., 1975
EPA HA RfD	0.00008	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.00008	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.004	mg/kg-d	1993		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.34	mg/kg-d		Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 8-week study in rat; JAFCAU Journal of Agricultural and Food Chemistry. (American Chemical Soc., Distribution Office Dept. 223, POB 57136, West End Stn., Washington, DC 20037) V.1- 1953- Volume(issue)/page/year 21,324,1973
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.006	mg/L			OPP
RAISHE Slope Factor	0.06	$(mg/kg\text{-}d)^{-1}$			OPP
OEHHA Slope Factor (oral)	0.045	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1988		
IARC Carcinogen Classification	3		2001		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS; OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen; Developmental	UMD; CACART
EPAHA-DWEL	0.003	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.4	µg/L			
Health Reference Level (HRL)[2] cancer	0.06	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**299**	**lbs/yr**	**4**	**States**	**2004**	

Supplemental Water Data		
OPP Estimated Environmental Concentration	Surface water chronic: 0.1 ug/L	Ground water chronic: 0.21 ug/L

HRL Ratios (HRL/GWC EEC)	Non-cancer: 6.67	Cancer: 0.286	

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
	10K - 500K	lbs/yr	2002			

Use	Pesticide (NTP) Accelerator; industrial intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	6.5	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.40E-07	atm-m^3/mol		
Water Solubility	20,000	mg/L		(at 30 C)
% water PBT profiler	48			

Contaminant:	Fenamiphos
Substance Key:	27401
Contaminant ID (CASRN):	22224926

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	8	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 0.051

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0001**	**mg/kg-d**		**Plasma ChE inhibition.**	**Reference Dose; Basis = NOAEL 0.01 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.00025	mg/kg-d	1986	Cholinesterase inhibition	Reference Dose; Basis = NOEL 0.025 mg/kg-d; UF = 100.
EPA HA RfD	0.0001	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.00025	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.0008	mg/kg-d	1997		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	E		1988		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring. OPP changed cancer classification from D to E.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.0035	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**726,675**	**lbs/yr**	**14**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		Not Detected		Not Detected	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0		Not Detected		Not Detected	ug/L	

OPP Estimated Environmental Concentration	Surface water chronic: 13.7 ug/L	Ground water chronic: 0.47 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 0.051	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = biodegrades slowly with acclimation; PBT
K_{OC}, Organic Carbon Partition Coefficient	225.1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.23	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.21E-09	unitless		
Water Solubility	329	mg/L		
% water PBT profiler	12			

Contaminant:	Formaldehyde
Substance Key:	2119
Contaminant ID (CASRN):	50000

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/DBP ICR MED: 184

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.2**	**mg/kg-d**	**1990**	**Reduced weight gain, histopathology in rats. Decreased absolute heart, liver, testes & kidney weights. Increased relative brain, testes weights.**	**Reference Dose; Basis = NOAEL 15 mg/kg-d; UF = 100. Til et al., 1989**
EPA HA RfD	0.2	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.2	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.2	mg/kg-d	1999	Gastro.	Minimal Risk Level; Basis = NOAEL 15 mg/kg-d; ATSDR MRL-int = 0.3 mg/kg-d (Til et al., 1989).
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	12.5	mg/kg-d		Liver - other changes, Blood - changes in spleen	Lowest Observed Adverse Effect Level; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,339,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B1		1993		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification	2A		1995		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	7	ug/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
DBP ICR	**227**	**126**	**55.5**	**5**	**30.6**	**7.6**	**29.7**	**ug/L**	

Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	326,298	lbs/yr	31	States	2004	
TRI Release - total	26,992,234	lbs/yr	46	States	2004	

HRL Ratios (HRL/DBP ICR MED)	Non-cancer: 184				Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Naturally-occurring fungicide (NTP); Disinfection by-Product; gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades Fast with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.35	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.38E-07	atm-m^3/mol		
Water Solubility	400,000	mg/L		
% water PBT profiler				

Contaminant:	Germanium
Substance Key:	18876
Contaminant ID (CASRN):	7440564

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	4	10

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 0.003

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.318**	**mg/kg-d**		**Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis)**	**Lowest Observed Adverse Effect Level; JJMDAT Japanese Journal of Medicine. (Nankodo Co., Ltd., POB 5272, Tokyo International 100-31, Japan) V.1-30, 1962-1991. For publisher information, see IEDIEP. Volume(issue)/page/year 30,67,1991. EPA believes the RTECS LOAEL may be incorrectly cited (should be 3.18 not 0.318). Both values suggest listing germanium.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.744	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**4**	**0.40**	**26**	**230**	**220**	**220**	**230**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.003			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Use data are for germanium dioxide: Phosphors, transistors and diodes; electroplating (HSDB); naturally-occurring					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; All use and env. fate data are for germanium dioxide; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		unitless		
Water Solubility	4,470	mg/L		
% water PBT profiler				

Contaminant	Halon 1011 (bromochloromethane)
Substance Key:	2613
Contaminant ID (CASRN):	74975

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	5	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 7

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	**0.01**	**mg/kg-d**		**Increased liver-to-body weight ratio. Cloudy swelling and vacuolization of hepatocytes.**	**Reference Dose**
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.5	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,881**	**65**	**0.5**	**0.05**	**210**	**1**	**10**	**210**	**ug/L**	
NCOD Round 2 finished water	22,974	106	0.461	0.0023	33.4	1	6	27.9	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,238	7	0.165	0.01	0.45	0.2	0.422	0.45	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS			0.1			1		ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
Krasner, et al., 2006			0.0	Not detected	Not detected	Not detected	Not detected		Krasner, et al., 2006. Env. Sci. & Technol. 40 (23): pp. 7175-7185.

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 7				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Fire extinguishing fluid; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	23.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.41	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00146	atm-m^3/mol		
Water Solubility	16,700	mg/L		
% water PBT profiler	40			

Contaminant:	HCFC-22
Substance Key:	2654
Contaminant ID (CASRN):	75456

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	10

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**13.5**	**mg/kg-d**	**1983**	**Brain and Coverings - other degenerative changes, Blood - changes in other cell count (unspecified), Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect Level; 26-week study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-1936- Volume(issue)/page/year 48(8),69,1983**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	31.5	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	2,972	lbs/yr	1	States	2004	
TRI Release - total	**7,075,769**	**lbs/yr**	**35**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			
Use	Refrigerant; low-temperature solvent; fluorocarbon resins, especially tetrafluoroethylene polymers (HSDB); gas					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	35.04	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.08	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.07E-02	atm-m^3/mol		
Water Solubility	2,770	mg/L		
% water PBT profiler	43			

Contaminant:	Hexane
Substance Key:	4858
Contaminant ID (CASRN):	110543

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.06**	**mg/kg-d**	**1989**	**Decreased body weight gain**	**Reference Dose; Basis LOAEL = 570 mg/kg-d, UF = 10,000, oral rat study. Health and Environmental Effects Document for n-Hexane, ECAO-CIN-G076, Environmental Criteria and Assessment Office, Final Draft, September 1989.**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1,429	mg/kg-d		Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; TIHEEC Toxicology and Industrial Health. (Princeton Scientific Pub. Co., POB 2155, Princeton, NJ 08540) V.1- 1985- Volume(issue)/page/year 1(3),67,1985
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1987		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	420	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	14,489	lbs/yr	38	States	2004	
TRI Release - total	**39,844,882**	**lbs/yr**	**53**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Naturally-occurring; solvent (NTP)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = biodegrades fast with acclimation
K_{OC}, Organic Carbon Partition Coefficient	149	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.9	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.8	atm-m^3/mol		
Water Solubility	9.5	mg/L		
% water PBT profiler				

Contaminant:	Hydrazine
Substance Key:	6460
Contaminant ID (CASRN):	302012

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	9	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.001**	**mg/L**			
RAISHE Slope Factor	3	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	3	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B	1999			
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; IARC; OEHHA; RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.01	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**165,485**	**lbs/yr**	**16**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			

Use	Chemical intermediate; rocket propellant; oxygen/chlorine scavenger (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	14.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.07	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.44E-08	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant:	Mestranol
Substance Key:	2581
Contaminant ID (CASRN):	72333

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	3	9	4

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/Kolpin MAX: 0.688

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOAEL	0.04	mg/kg-d	2001	Hematalogical effects	Supplemental Data; Maier and Hermann, 2001. Regulatory Toxicology and Pharmacology, 34, pp 53-61.
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL (for ethinyl estradiol)	**0.015**	**mg/kg-d**	**1981**	**Increased serum levels of alanine aminotransferase (ALT), aspartate aminotransferase (AST) and γ-glutamultransferase (GGT).**	**Supplemental Data; Tennant, et al., 1981 as cited in Maier and Hermann, 2001.**
Supplemental LOAEL	0.00083	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.28	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Kolpin, et al., 2002	**70**		**4.3**		**0.407**	**0.017**		**ug/L**	**Response to Comment on National Surface Water Reconnaissance Kolpin et al., 2002: Env. Sci. & Technol., 36(18), pp. 4007-4008.**
HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 0.688				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Metabolite of ethinyl estradiol					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60	days	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.68	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	Practically insoluble	mg/L		
% water PBT profiler	9			

Contaminant:	Methamidophos
Substance Key:	21025
Contaminant ID (CASRN):	10265926

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	5	10	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 0.304

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0003**	**mg/kg-d**		**Brain ChE inhibition**	**Reference Dose; Basis = NOAEL 0.03 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.00005	mg/kg-d	1987	Decreased body weight	Reference Dose; Basis = LOEL 0.05 mg/kg-d
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.00005	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.004	mg/kg-d	1990		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2.1	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**965,584**	**lbs/yr**	**39**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data						
OPP Estimated Environmental Concentration	Surface water chronic: 6.9 ug/L			Ground water chronic: 3.8 ug/L		
HRL Ratios (HRL/SWC EEC)	Non-cancer: 0.304			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	PBT; BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient	3.848	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.70E-10	atm-m^3/mol		
Water Solubility	1000000	mg/L		
% water PBT profiler	39			

Contaminant	Methanol
Substance Key:	2508
Contaminant ID (CASRN):	67561

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	10	10

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.5**	**mg/kg-d**	**1988**	**Increased SAP & SGPT& liver weight, decreased brain weight**	**Reference Dose; U.S. EPA, 1986; Basis = NOEL 500 mg/kg-d; UF = 1,000; Rat**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.5	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	3.13	mg/kg-d		Liver - other changes	Lowest Observed Adverse Effect Level; 200 day oral study in rats; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,89,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	5,600	mg/kg		Details of toxic effects not reported other than lethal dose value	Rats; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,87,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,500	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	10,966,234	lbs/yr	41	States	2004	
TRI Release - total	**201,697,278**	**lbs/yr**	**52**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Industrial solvent; gasoline additive (HSDB); anti-freeze

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades Fast
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.77	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.56E-06	atm-m3/mol		
Water Solubility	1000000	mg/L		
% water PBT profiler				

Contaminant:	Methyl bromide (Bromomethane)
Substance Key:	2601
Contaminant ID (CASRN):	74839

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 0.891

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0014**	**mg/kg-d**	**1988**	**Epithelial hyperplasia in the forestomach**	**Reference Dose; Basis = NOAEL 1.4 mg/kg-day; UF = 1,000; Rat. Danse et al., 1984**
EPA HA RfD	0.001	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.0014	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.003	mg/kg-d	9/1992	Gastro	Int-Minimal Risk Level
JMPR, maximum ADI	1	mg/kg-d	1966		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	29.9	mg/kg-d		Kidney, Ureter, Bladder - other changes in urine composition, Skin and Appendages - hair, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 2-year oral study in rat; FCTOD7 Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982- Volume(issue)/page/year 28,109,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1989		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification	3		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL	0.05	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	9.8	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	20,198	155	**0.77**	0.07	43	1	11	34	ug/L	
NCOD Round 2 finished water	23,328	175	0.75	0.09	38.1	**1.6**	8.1	27.2	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,317	3	0.069	0.04	0.5	0.1	0.5	0.5	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	32,803,943	lbs/yr	29	States	1997	
TRI Release - surface water	200	lbs/yr	3	States	2004	
TRI Release - total	533,748	lbs/yr	17	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 0.891				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			

Use	Cancelled fumigant (NTP); gas			
Environmental Fate Parameters	**Value**	**Units**	**Degradation code**	**Notes**
$T_{1/2}$, Half life	20-26.7	days	BS	hydrolysis only; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	9-22	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.19	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.34E-03	atm-m^3/mol		
Water Solubility	13,400	mg/L		
% water PBT profiler	42			

Contaminant:	Methyl tert-butyl ether
Substance Key:	11918
Contaminant ID (CASRN):	1634044

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	8	5	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/UCMR 90%: 58.3 CAR HRL/UCMR 90%: 0.539

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.3	mg/kg-d	8/1996	Hepatic: Decreased blood urea nitrogen levels.	Int-Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.01	mg/kg-d	1991		Tolerable Daily Intake; Basis NOAEL 100 mg/kg-d
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	300	mg/kg-d		Kidney, Ureter, Bladder - changes in bladder weight, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Nutritional and Gross Metabolic - changes in calcium	Lowest Observed Adverse Effect Level; 90-day study in rat; JACTDZ Journal of the American College of Toxicology. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1-12, 1982-1993. Discontinued. Volume(issue)/page/year 9(5),525,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.0018**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,100	ug/L			
Health Reference Level (HRL)[2] cancer	19.4	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,617**	**17**	**0.47**	**5**	**49**	**9.2**	**36**	**49**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,328	424	9.8	0.01	2,300	0.3	7.85	1,800	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	40,177	lbs/yr	17	States	2004	
TRI Release - total	2,040,906	lbs/yr	42	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (HRL/UCMR 90%)	Non-cancer: 58.3				Cancer: 0.539				

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Octane booster in gasoline; manufacture of isobutene; extraction solvent (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	6	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.87E-04	atm-m^3/mol		
Water Solubility	51,000	mg/L		
% water PBT profiler	46			

Contaminant:	Metolachlor
Substance Key:	35270
Contaminant ID (CASRN):	51218452

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	6	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R2 90%: 321

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.1**	**mg/kg-d**	**1995**	**Decreased body weight gain**	**Reference Dose; Basis NOAEL = 9.7 mg/kg-d; UF = 100. OPP RED.**
EPA IRIS (ITER) RfD	0.15	mg/kg-d	1988	Decreased body weight gain	Reference Dose; Basis = NOEL 15 mg/kg-d; UF = 100. Ciba-Geigy, 1983
EPA HA RfD	0.1	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.15	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	25	mg/kg-d		Behavioral - food intake (animal), Nutritional and Gross Metabolic - weight loss or decreased weight gain, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - phosphatases	Lowest Observed Adverse Effect Level; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 14,103,1989
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,150	mg/kg		Details of toxic effects not reported other than lethal dose value	NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 14,103,1989
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1988		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	3.5	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**13,007**	**116**	**0.89**	**0.01**	**13.8**	**0.57**	**2.18**	**7.1**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	7,165	1,817	25.4	0.0002	77.6	0.025	0.58	6.71	ug/L	
NREC ambient surface water			8.76			0.12			ug/L	National Reconnaissance
NREC ambient ground water			1.23			0.125			ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	67,336,211	lbs/yr	48	States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP finished water	203	102	50.2	0.01	0.079			ug/L	Pesticide Data Program (USDA); 2001
PDP finished water	582	233	40	0.005	0.226			ug/L	2002
PPMP ambient water		288	89.2		3.32		0.033	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		198	86.8		0.661		0.336	ug/L	

	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,345	15	0.2	0.05	0.7	0.06	0.1	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	2,082	676	32.5	0.00867	86	0.19	1.4	ug/L	

HRL Ratios (HRL/NCOD R2 90%)	Non-cancer: 321	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	47;78	days	BSA	aerobic;anaerobic; BSA = biodegrades slow with acclimation
K_{OC}, Organic Carbon Partition Coefficient	22-310	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.13	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.00E-09	atm-m^3/mol		
Water Solubility	530	mg/L		
% water PBT profiler	12			

Contaminant:	Metolachlor ethanesulfonic acid (ESA)
Substance Key:	79218
Contaminant ID (CASRN):	171118095

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	1	6	6

Scores based on parent

3-model Categorical Prediction
NL
HRL Ratio(s)
HRL/NAWQA 90%: ≥3,210 (NAWQA data for metolachlor - parent)

HEALTH EFFECTS DATA[1] - See Metolachlor Parent

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**≥1000**	**mg/kg-d**		**No biologically significant effects**	**Supplemental Data; EPA OPP NOAEL - FOR METOLACHLOR ESA**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	≥7,000	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data - FOR METOLACHLOR PARENT										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**13,007**	**116**	**0.89**	**0.01**	**13.8**	**0.57**	**2.18**	**7.1**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP finished water	83	19	22.9	0.50	2.21			ug/L	Pesticide Data Program (USDA); 2001 - **FOR METOLACHLOR ESA**
PDP finished water	318	198	51.9	0.02	2.24			ug/L	2002 - **FOR METOLACHLOR ESA**

FOR METOLACHLOR - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,345	15	0.2	0.05	0.7	0.06	0.1	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	2,082	676	32.5	0.00867	86	0.19	1.4	ug/L	

HRL Ratios (HRL/NCOD R290%)	Non-cancer: ≥3,210	Cancer:	NCOD data for metolachlor - parent

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide degradate

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Metolachlor oxanilic acid (OA)
Substance Key:	79220
Contaminant ID (CASRN):	152019733

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	1	6	6

Scores based on parent

3-model Categorical Prediction
NL
HRL Ratio(s)
HRL/NAWQA 90%: 3,210 (NAWQA data for metolachlor - parent)

HEALTH EFFECTS DATA[1] - See Metolachlor Parent

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**1,000**	**mg/kg-d**		**No biologically significant effects**	**Supplemental Data; EPA OPP NOAEL - FOR METOLACHLOR OA**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7,000	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data - FOR METOLACHLOR PARENT										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**13,007**	**116**	**0.89**	**0.01**	**13.8**	**0.57**	**2.18**	**7.1**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP finished water	138	14	10.1	0.50	4.42			ug/L	Pesticide Data Program (USDA); 2001 - **FOR METOLACHLOR OA**
PDP finished water	404	152	37.6	0.02	1.41			ug/L	2002 - **FOR METOLACHLOR OA**

FOR METOLACHLOR - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,345	15	0.2	0.05	0.7	0.06	0.1	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	2,082	676	32.47	0.00867	86	0.19	1.4	ug/L	

HRL Ratios (HRL/NCOD R290%)	Non-cancer: 3,210	Cancer:	NCOD data for metolachlor - parent

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide degradate

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Microcystin-LR
Substance Key:	76859
Contaminant ID (CASRN):	101043372

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
9	3	10	4

Scores based on supplemental data

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/AWWARF Typical Range MAX: 0.21

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value	**0.000003**	**mg/kg-d**	**2006**	**Liver effects**	**Supplemental Data - draft RfD; Basis NOAEL 3 ug/kg-d. Ueno, Y., Y. Makita, S. Nagata et al. 1999. No chronic oral toxicity of a low-dose of microcystin-LR, a cyanobacterial hepatoxin, in female Balb/C mice. Environ. Toxicol. 14(1):45-55.**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.021	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
US and Canadian drinking water (bloom area, source, finished water)	**677**	**542**	**80**		**0.1**			**ug/L**	**Maximum of typical range of detects (AWWARF, Carmichael)**
US and Canadian drinking water (bloom area, source, finished water)	677	542	80	0.002	1,200			ug/L	Maximum and minumum of detects (AWWARF, Carmichael)
HRL Ratios (HRL/AWWARF Typical Range MAX)	Non-cancer: 0.21				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Cyanobacterial toxin

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Molinate
Substance Key:	12912
Contaminant ID (CASRN):	2212671

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	7	1	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/UCMR 90%: 2.46

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.001	mg/kg-d	2001	Degeneration/demyelination in sciatic nerve and atrophy/reserve cell hyperplasia of muscle	Reference Dose; Basis LOAEL = 0.3 mg/kg-d, UF = 300, 2-year rat study. A Determination of the Existence of a Common Mechanism of Toxicity and a Screening Level Cumulative Food Risk Assessment, December 2001. OPP issued RfD as part of health assessment not the RED; http://epa.gov/oppsrrd1/cumulative/thiocarb.pdf
EPA IRIS (ITER) RfD	**0.002**	**mg/kg-d**	**1988**	**Reproductive toxicity. Alteration in sperm morphology, reduced number of viable fetuses/litter, increased number of resorptions/litter**	**Reference Dose; Basis NOEL 0.2 mg/kg-d; UF = 100. Stauffer Chemical Co., 1981**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	13.1	mg/kg-d		Endocrine - other changes, Blood - normocytic anemia, Nutritional and Gross Metabolic - body temperature decrease	Lowest Observed Adverse Effect Level; 43 week study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 40(10),104,1975
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,621**	**1**	**0.03**	**5.7**	**5.7**	**5.7**	**5.7**	**5.7**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	7,118	120	1.68	0.001	200	0.0372	3.41	47.9	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	3,669,398	lbs/yr	6	States	1997	
TRI Release - surface water	115	lbs/yr	1	States	2004	
TRI Release - total	2,089	lbs/yr	2	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units	Notes
PPMP ambient water		1	0.3		0.004			ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
HRL Ratios (HRL/UCMR 90%)	Non-cancer: 2.46				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life	40-160	days	BST	BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	80-120	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.21	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.10E-06	atm-m^3/mol		
Water Solubility	970	mg/L		
% water PBT profiler	19			

Contaminant:	Molybdenum
Substance Key:	18825
Contaminant ID (CASRN):	7439987

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	9	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 1.17

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.005**	**mg/kg-d**	**1992**	**increased uric acid levels**	**Reference Dose; Koval'skiy et al., 1961; oral study in humans; UF = 30; Basis LOAEL = 0.14 mg/kd-d**
EPA HA RfD	0.005	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.005	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value	0.03	mg/kg-d		Effects on repro & fetal development (decreased gestational weight gain, prolonged estrus cycle, failure to breed). Renal failure, diuresis, proteinuria	Supplemental Data; UL; IOM
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.5	mg/kg-d		Liver - other changes, Kidney, Ureter, Bladder - other changes, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 19 week oral study in rabbits; VCVN5 "Vrednie chemichescie veshestva. Neorganicheskie soedinenia elementov V-VII groopp" (Hazardous substances. Inornanic substances containing V-VII group elements), Bandman A.L. et al., Chimia, 1989. Volume(issue)/page/year -,317,1989
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1993		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen List	UMD
EPAHA-DWEL	0.2	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**77**	**7.79**	**6.1**	**180**	**10**	**30**	**110**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 1.17	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Use data for molybdenum trioxide: As steel alloy; chemical reagent (HSDB); naturally-occurring

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; All use and env. fate data for molybdenum trioxide; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		unitless		
Water Solubility	1,066	mg/L		All use and env. fate data for molybdenum trioxide
% water PBT profiler				

Contaminant:	Nitrobenzene
Substance Key:	3998
Contaminant ID (CASRN):	98953

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	1	10

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/UCMR AM 90%: 0.14

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.002**	**mg/kg-d**	**2009**	**Increased reticulocytes and methemaglobinemia**	**Reference Dose; NTP, 1983; subchronic rat study; UF = 1,000; Basis BMDL = 1.8 mg/kg-d**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0005	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1990		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification	2B		1996		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART, IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen List	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,064**	**2**	**0.065**	**21.6**	**100**	**60.8**	**100**	**100**	**ug/L**	**Analyzed under UCMR 1, List 1, Assessment Monitoring with detection limit of 10 ug/L.**
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	60	lbs/yr	1	States	2004	
TRI Release - total	350,301	lbs/yr	14	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
UCMR finished water	338	0	0	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Analyzed under UCMR 1, List 2, Screening Survey with detection limit of 0.5 ug/L.

HRL Ratios (HRL/UCMR AM 90%)	Non-cancer: 0.14				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Solvent (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	30.6-370	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.85	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.40E-05	atm-m^3/mol		
Water Solubility	1,800	mg/L		
% water PBT profiler	31			

Contaminant	Nitroglycerin
Substance Key:	2252
Contaminant ID (CASRN):	55630

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	7	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.125**	**mg/kg-d**		**Cardiac - cardiomyopathy including infarction, Cardiac - EKG changes not diagnostic of specified effects, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - multiple enzyme effects**	**Lowest Observed Adverse Effect Level; 26 week oral study in rats; FATOAO Farmakologiya i Toksikologiya (Moscow). For English translation, see PHTXA6 and RPTOAN. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.2- 1939- Volume(issue)/page/year 48,76,1985**
Supplemental LOAEL	0.008	mg/kg-d			Supplemental Data; RTECS LOAEL, acute human study
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	105	mg/kg		Behavioral - somnolence (general depressed activity)	Oral study in rats; YACHDS Yakuri to Chiryo. Pharmacology and Therapeutics. (Raifu Saiensu Shuppan K.K., 2-5-13, Yaesu, Chuo-ku, Tokyo 104, Japan) V.1- 1972- Volume(issue)/page/year 13,3649,1985
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.2	mg/L	1987		
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.292	ug/L			
Health Reference Level (HRL)[2] cancer	2	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0.2	lbs/yr	1	States	2004	
TRI Release - total	**55,979**	**lbs/yr**	**9**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			

Use	Pharmaceutical/medication; production of explosives; Rocket propellants; (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades Fast
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.62	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.87E-08	atm-m3/mol		
Water Solubility	1,380	mg/L		
% water PBT profiler	32			

Contaminant:	N-Methyl-2-pyrrolidone
Substance Key:	9980
Contaminant ID (CASRN):	872504

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	5	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	**0.6**	**mg/kg-d**	**2001**	**Decreased weight gain, neurobehavioral effects, sedative effects**	**Tolerable Daily Intake; Basis NOAEL = 169 mg/kg-d, UF = 300, 90-day rat study, WHO/UNEP CICAD TDI Study #35**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	120	mg/kg-d		Endocrine - changes in spleen weight	Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0528073
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,914	mg/kg		Details of toxic effects not reported other than lethal dose value	ARZNAD Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag, Postfach 1255, W-7960 Aulendorf, Fed. Rep. Ger.) V.1- 1951- Volume(issue)/page/year 26,1581,1976
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD; CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4,200	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	17,972	lbs/yr	13	States	2004	
TRI Release - total	**6,311,503**	**lbs/yr**	**42**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			
Use	Chemical industry solvent; solvent for pesticide application for food packing materials (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades Fast
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.20E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	42			

Contaminant:	N-Nitrosodiethylamine (NDEA)
Substance Key:	2243
Contaminant ID (CASRN):	55185

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
9	8	1	2

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

See also supplemental water data

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.00002**	**mg/L**			
RAISHE Slope Factor	150	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	36	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2A		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; OEHHA; IARC; RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.0002	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**1,000**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	26	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	26	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Gasoline and lubricant additive; antioxidant; stabilizer in plastics (HSDB); Disinfection by-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BS/BSA	BS = Biodegrades Slowly; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	142.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.63E-06	atm-m^3/mol		
Water Solubility	106,000	mg/L		
% water PBT profiler	53			

Contaminant:	N-Nitrosodimethylamine (NDMA)
Substance Key:	2446
Contaminant ID (CASRN):	62759

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	10	2

Scores based on supplemental data

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/CAL DHS 90%: 0.329
CAR HRL/CAL DHS 90%: 0.004

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.000008	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.2	mg/kg-d		Immunological Including Allergic - decrease in cellular immune response, Immunological Including Allergic - decrease in humoral immune response, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; JTEHD6 Journal of Toxicology and Environmental Health. (Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005) V.1- 1975/76- Volume(issue)/page/year 37,351,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.00007**	**mg/L**			**IRIS**
RAISHE Slope Factor	51	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	16	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1986	Liver	
IARC Carcinogen Classification	2A		1987		(Vol. 17, Suppl. 7; 1987)
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAIS; EPA; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.056	ug/L			
Health Reference Level (HRL)[2] cancer	0.00069	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	**409**	**87**	**21.3**	**0.001**	**440**	**0.009**	**0.17**	**ug/L**	**Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx**
STORET	585	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	

HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 0.329	Cancer: 0.004

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Industrial solvent; antioxidant; formerly in the production of rocket fuel (HSDB); Disinfection by-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	PBT; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	12	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.57	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.82E-06	atm-m^3/mol		@37°C
Water Solubility	Soluble	mg/L		
% water PBT profiler	52			

Contaminant:	N-Nitroso-di-n-propylamine (NDPA)
Substance Key:	8798
Contaminant ID (CASRN):	621647

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	2	2

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
CAR HRL/STORET 90%: 0.00049

HEALTH EFFECTS DATA[1]

See also supplemental water data

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0005**	**mg/L**			**IRIS**
RAISHE Slope Factor	7	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	7	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1987	Liver	
IARC Carcinogen Classification	2B		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; RAIS; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.005	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**506**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
CAL DHS	127	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	1,309	22	1.68	0.19	20	10	10.24	ug/L	
HRL Ratios (HRL/STORET 90%)	Non-cancer:				Cancer: 0.00049				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Research chemical (HSDB); Disinfection by-Product?

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	130	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.36	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.38E-06	atm-m^3/mol		@37°C
Water Solubility	10,000	mg/L		
% water PBT profiler	44			

Contaminant	N-Nitrosodiphenylamine
Substance Key:	3193
Contaminant ID (CASRN):	86306

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	2	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/CAL DHS 90%: 1.84
CAR HRL/CAL DHS 90%: 0.0932

HEALTH EFFECTS DATA[1]

See also supplemental water data

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.02**	**mg/kg-d**		**Corneal opacities, epithelial hyperplasia of the bladder and decreased weight gain**	**Reference Dose; NCI 1979; Basis LOAEL, rat, UF=3000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	20.5	mg/kg-d	1966	Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 17-week oral study in rabbit; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 10(4),60,1966
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.0049	$(mg/kg-d)^{-1}$			IRIS
OEHHA Slope Factor (oral)	0.009	$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2				Cited by OEHHA
IARC Carcinogen Classification	3		1987		Vol. 27, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; OEHHA; RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	ug/L			
Health Reference Level (HRL)[2] cancer	7.1	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**14**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	133	1	0.75	76.2	76.2	76.2	76.2	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 1.84				Cancer: 0.0932				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Rubber and polymer additive; chemical reagent (HSDB); DBP

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	6,154	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.13	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.21E-06	atm-m^3/mol		
Water Solubility	35	mg/L		
% water PBT profiler				

Contaminant:	N-Nitrosopyrrolidine (NPYR)
Substance Key:	10160
Contaminant ID (CASRN):	930552

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8		

3-model Categorical Prediction
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

See also supplemental water data

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.002**	**mg/L**			**IRIS**
RAISHE Slope Factor	2.1	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	2.1	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1986	Liver	
IARC Carcinogen Classification	2B		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; OEHHA; RAIS; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.02	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
STORET	27	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Research chemical (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	19	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.19	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.89E-08	atm-m^3/mol		@37°C
Water Solubility	1,000,000	mg/L		
% water PBT profiler	48			

Contaminant:	Norethindrone (19-Norethisterone)
Substance Key:	2525
Contaminant ID (CASRN):	68224

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	7	10	4

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/Kolpin MAX: 0.0459

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**0.0167**	**mg/kg-d**		**The norethindrone label indicates that if the drug is taken during the first trimester of pregnancy that the risk for hypospadia in male offspring doubles.**	**Supplemental Data; Maximum Recommended Daily Dose (MRDD)**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
NTP Carcinogen Classification	Reasonably anticipated to be carcinogenic				NTP 11th Report on Carcinogens; no quantificatio of dose-response
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD, CACART
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.04	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Kolpin, et al., 2002	**70**		**12.8**		**0.872**	**0.048**		**ug/L**	**National Surface Water Reconnaissance; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.**

HRL Ratios (HRL/Kolpin MAX)	Non-cancer: 0.0459	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60	days	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.97	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.80E-10	atm-m^3/mol		
Water Solubility	7.04	mg/L		
% water PBT profiler	12			

Contaminant:	n-Propylbenzene
Substance Key:	4328
Contaminant ID (CASRN):	103651

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	4	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 1.21

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**2.5**	**mg/kg-d**		**Blood - changes in spleen**	**Lowest Observed Adverse Effect Level; VCVGH "Vrednie chemichescie veshestva, galogenproisvodnie uglevodorodov". (Hazardous substances Galogenated hydrocarbons) Bandman A.L. et al., Chimia, 1990. Volume(issue)/page/year -,167,1990; 24 week oral study in rat**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	6,040	mg/kg		Behavioral - somnolence (general depressed activity)	Rats; FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 2,327,1964
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	5.83	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,724**	**42**	**0.33**	**0.03**	**34**	**0.7**	**4.8**	**34**	**ug/L**	
NCOD Round 2 finished water	22,970	54	0.24	0.1	21	0.6	4	21	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	53	1.23	0.004	47	0.024	5	47	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 1.21	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
	10K - 500K	lbs/yr	2002			

Use	Manufacture of methylstyrene; textile dyeing; printing solvent; asphalt and naphtha constituent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	495-955	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.69	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.05E-02	atm-m^3/mol		
Water Solubility	23.4	mg/L		
% water PBT profiler	22			

Contaminant:	o-Toluidine
Substance Key:	3768
Contaminant ID (CASRN):	95534

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	340	mg/kg-d		Kidney, Ureter, Bladder - proteinuria, Blood - normocytic anemia, Nutritional and Gross Metabolic - weight loss or decreased weight gain.	Lowest Observed Adverse Effect Level; VINIT Vsesoyuznyi Institut Nauchnoi i Tekhnicheskoi Informatsii (VINITI). All-Union Institute of Scientific and Technical Information. (Moscow, USSR) Use information broker to obtain publications. Volume(issue)/page
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.24	$(mg/kg\text{-}d)^{-1}$			HEAST
OEHHA Slope Factor (oral)	**0.18**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification	2A	2000			Vol. 77; 2000
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, RAIS, OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	793	ug/L			
Health Reference Level (HRL)[2] cancer	0.194	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**10,774**	**lbs/yr**	**9**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M - 100M	lbs/yr	1998			
	>10M - 50M	lbs/yr	2002			

Use	Intermediate in the manufacture of dyes, rubber, pharmaceuticals and pesticides (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	74.04	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.98E-06	atm-m^3/mol		
Water Solubility	16,600	mg/L		
% water PBT profiler				

Contaminant:	Oxirane, methyl-
Substance Key:	2661
Contaminant ID (CASRN):	75569

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	10	8

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.001	mg/kg-d	1981	Increased combined incidence of hyperkeratosis, hyperplasia and papillomas.	Reference Dose; Basis = $BMDL_{10}$ 1.4 mg/kg-d; UF = 1000.
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	26	mg/kg-d		Brain and Coverings - other degenerative changes, Liver - other changes, Blood - other changes	Lowest Observed Adverse Effect Level; 45-day study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 46(7),76,1981
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.15**	**$(mg/kg-d)^{-1}$**			
RAISHE Slope Factor	0.24	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)	0.24	$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2	1990			
IARC Carcinogen Classification	2B		1994		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAIS; OEHHA; EPA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	60.7	ug/L			
Health Reference Level (HRL)[2] cancer	0.233	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	28,761	lbs/yr	5	States	2004	
TRI Release - total	**433,536**	**lbs/yr**	**28**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Chemical intermediate (NTP)					

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life		length of time	BS	PBT; BS = biodegrades slow
K_{OC}, Organic Carbon Partition Coefficient	2.324	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.98E-05	atm-m^3/mol		
Water Solubility	590,000	mg/L		
% water PBT profiler	44			

Contaminant:	Oxydemeton-methyl
Substance Key:	6458
Contaminant ID (CASRN):	301122

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	5	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 1.01

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00013**	**mg/kg-d**		**Decreased erythrocyte & brain ChE**	**Reference Dose; Basis = NOAEL 0.013 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.0025	mg/kg-d	1967	Decreased body weight	Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	10	mg/kg		Details of toxic effects not reported other than lethal dose value	85JDAH "Organophosphorus Pesticides Organic and Biological Chemistry," Eto, M., Cleveland, OH, CRC Press, Inc., 1974 Volume(issue)/page/year -,197,1974
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		male, female	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.91	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**154,227**	**lbs/yr**	**19**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units	Notes
PPMP ambient water		0	0					ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0					ug/L	

OPP Estimated Environmental Concentration	Surface water chronic: 0.9 ug/L	Ground water chronic: 0.006 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 1.01	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	PBT; BS =Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.74	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.62E-13	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	39			

Contaminant:	Oxyfluorfen
Substance Key:	34731
Contaminant ID (CASRN):	42874033

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 3.0 CAR HRL/SWC EEC: 0.067

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.003	mg/kg-d	1986	Incr. abs. liver weight; nonneoplastic lesions	Reference Dose; Basis = NOEL 0.3 mg/kg-d; UF = 100.
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.003	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	5	mg/kg		Details of toxic effects not reported other than lethal dose value	PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,643,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.0732**	**$(mg/kg-d)^{-1}$**			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	ug/L			
Health Reference Level (HRL)[2] cancer	0.478	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**705,255**	**lbs/yr**	**37**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	5	lbs/yr	2	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		Not Detected		Not Detected	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0		Not Detected		Not Detected	ug/L	
OPP Estimated Environmental Concentration		Surface water chronic: 7.1 ug/L			Ground water chronic: 0.08 ug/L				
HRL Ratios (HRL/SWC EEC)	Non-cancer: 3.0				Cancer: 0.067				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide; herbicide

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = biodegrades sometimes/recalcitrant; PBT
K_{OC}, Organic Carbon Partition Coefficient	46,800	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.73	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.23E-07	atm-m^3/mol		
Water Solubility	0.116	mg/L		
% water PBT profiler	5			

Contaminant:	Perchlorate
Substance Key:	24310
Contaminant ID (CASRN):	14797730

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	1	9	8

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
NC HRL/UCMR 90%: 0.35

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0007**	**mg/kg-d**	**2005**	**Radioactive iodide uptake inhibition (RAIU) in the thyroid**	**Reference Dose; Basis NOEL 0.007mg/kg-d**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value	6	ug/L	2000	Decreased newborn TSH	Supplemental Data; Brechner et al. 2000
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	See notes				Not likely to pose a risk of thyroid cancer in humans, at least at doses below those necessary to alter thyroid hormone homeostasis, based on the hormonally-mediated mode of action in rodent studies and species differences in thyroid function (IRIS).
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-Interim HA	15	ug/L			Interim Health Advisory; EPA is revisiting the intermin hHealth Advisory for perchlorate.
Health Reference Level (HRL)[2]	4.9	ug/L			The HRL for the CCL differs from the Interim HA based on the RSC used in the health advisory (0.62) and the default RSC (0.2) used for the CCL process.
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,554**	**147**	**4.14**	**4**	**420**	**6.5**	**14**	**59**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/UCMR 90%)	Non-cancer: 0.35				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
		lbs/yr	2002			

Use	Smokeless rocket and jet propellant; explosives; analytical chemistry, etching and engraving agent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	200,000	mg/L		All use and env. fate data are for ammonium perchlorate.
% water PBT profiler				

Contaminant:	Perfluorooctane sulfonic acid (PFOS)
Substance Key:	12176
Contaminant ID (CASRN):	1763231

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	3	10	7

3-model Categorical Prediction
L?-L
HRL Ratio(s)
NC HRL/MN MW MAX: 0.143

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
EPA/FR NOAEL	0.1	mg/kg-d		Reduced F2 Body Weight	No Observed Adverse Effect Level in 2 generation reproductive study in rats. Supplemental Data - FR October 18, 2000 (Volume 65, Number 202)] Perfluorooctyl Sulfonates; Proposed Significant New Use Rule [Page 62319-62333]
Supplemental NOAEL	**0.03**	**mg/kg-d**		**Decreased body weights, increased liver weights, lowered serum total cholesterol, lowered triiodothyronine (T3) concentration, and lowered estradiol levels**	**Supplemental Data - Seacat et al., 2002, Toxicol. Sci. 68, 249-264. EPA Provisional HA: http://www.epa.gov/waterscience/criteria/drinking/pha-PFOA_PFOS.pdf**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			
HSDB Lowest Oral LD50	251	mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-Provisional HA	0.2	ug/L	January 2008		Provisional Health Advisory: http://www.epa.gov/waterscience/criteria/drinking/pha-PFOA_PFOS.pdf
Health Reference Level (HRL)[2]	0.2	ug/L			Note: HRL is based on adult exposure factors (70 kg body weight and 2 L/d ingestion). The HRL was calculated in a different manner than EPA's provisional HA because child exposure factors and toxicokinetic adjustments were used to derive the provisional HA.
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Range of Detects (ug/L)	Notes
Select New Jersey Water Systems	23	13	57%	0.0042-0.019	Targeted Sampling 2006 - Targeted study "Determination of Perfluorooctanoic Acid (PFOA) in Aqueous Samples, Final Report." Jan 2007, NJDEP, Division of Water Supply.
Select Minnesota municipal wells	**37**	**6**	**16.2%**	**ND-1.4**	**Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.**
Select Minnesota non-community wells	22	0	0%	ND	Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.
Select Minnesota private wells	26	0	0%	ND	Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.
Aggregate of above Minnesota wells	85	6	7.1%	ND-1.4	Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.

HRL Ratios (HRL/MN MW MAX)	Non-cancer: 0.143	Cancer:	

Production	Amount Range	Units	Year		
CUSIUR Production Data	10-500K	lbs/yr	2002		
	0	lbs/yr	2003 (EPA est.)	Estimate of zero as phased out.	

Use	Surface-active agents in aqueous media; chemical intermediate; in fire-fighting applications, floor polish; metal plating baths; pesticide active ingredient for ant bait traps. (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	100,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		cm3/g		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	370	mg/L		
% water PBT profiler				

Contaminant:	Perfluorooctanoic acid (PFOA)
Substance Key:	6614
Contaminant ID (CASRN):	335671

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	10	6

Scores based on supplemental data

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/MN MW MAX: 1.22

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**0.46**	**mg/kg-d**	**2006**	**Increased maternal liver weight at term**	**Supplemental Data (BMDL10), Lau, 2006. Tox. Sci., 90, 2, pp. 510-518. EPA Provisional HA: http://www.epa.gov/waterscience/criteria/drinking/pha-PFOA_PFOS.pdf**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-Provisional HA	0.4	ug/L	January 2008		Provisional Health Advisory: http://www.epa.gov/waterscience/criteria/drinking/pha-PFOA_PFOS.pdf
Health Reference Level (HRL)[2]	1.1	ug/L			Note: HRL is based on adult exposure factors (70 kg body weight and 2 L/d ingestion). This value differs from EPA's provisional HA because child exposure factors and toxicokinetic adjustments were used to derive the provisional HA.
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Range of Detects (ug/L)	Notes
NJDEP - Jan 2007	23	18	78	<0.004 - 0.039	Targeted study "Determination of Perfluorooctanoic Acid (PFOA) in Aqueous Samples, Final Report." Jan 2007, NJDEP, Division of Water Supply.
Little Hocking, OH Municipal Wells (FW)	No data			1.5-7.2	Emmett, et al., 2006. J. Occ. Env. Med. Little Hocking, OH; data from 2002-2005.
Select Minnesota municipal wells	**37**	**6**	**16.2%**	**ND-0.9**	**Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.**
Select Minnesota non-community wells	22	0	0%	ND	Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.
Select Minnesota private wells	26	1	3.8%	ND-0.67	Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.
Aggregate of above Minnesota wells	85	7	8.2%	ND-0.9	Targeted Sampling 2004-2005 - H. Goeden and J. Kelly. Perfluorochemicals in Minnesota, MN DOH, 2/27/06.

HRL Ratios (HRL/MN MW MAX)	Non-cancer: 1.22	Cancer:

Production	Amount Range	Units	Year		
CUSIUR Production Data	10K - 500K	lbs/yr	1998		
	10K - 500K	lbs/yr	2002		

Use	Production of fluoropolymers (e.g., Teflon) and fluoroelastomers; in fire-fighting applications, cosmetics, greases and lubricants, paints, polishes and adhesives (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180	days	BST	PBT; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	27,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.10E-02	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	1			

Contaminant:	Permethrin
Substance Key:	35815
Contaminant ID (CASRN):	52645531

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	8	10	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 1,944 CAR HRL/SWC EEC: 4.05

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.25	mg/kg-d		Neurotox (aggression, abnormal/ decreased movement), increased body temperature. Q1* 0.0096 (mg/kg/day)-1. See CAR	Reference Dose; Basis = NOAEL 25 mg/kg-d; UF = 100.
EPA IRIS (ITER) RfD	0.05	mg/kg-d	1986	Increased liver weight	Reference Dose; Basis = NOEL 5 mg/kd-d; UF = 100.
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.05	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.2	mg/kg-d		Neurol.	Minimal Risk Level; ATSDR MRL-int.
JMPR, maximum ADI	0.05	mg/kg-d	1999		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.0096**	**$(mg/kg\text{-}d)^{-1}$**			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1991		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,750	ug/L			
Health Reference Level (HRL)[2] cancer	3.65	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,066,056**	**lbs/yr**	**48**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	17,979	lbs/yr	7	States	2004	

Supplemental Water Data			
OPP Estimated Environmental Concentration	Surface water chronic: 0.9 ug/L	Ground water chronic: 0 ug/L	

HRL Ratios (HRL/SWC EEC)	Non-cancer: 1,944				Cancer: 4.05		
Production	**Amount Range**	**Units**	**Year**				
CUSIUR Production Data		lbs/yr	1998				
		lbs/yr	2002				
Use	Insecticide (HSDB)						

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF/BST	BF = biodegrades fast; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	178,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	6.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.87E-06	atm-m^3/mol		
Water Solubility	0.006	mg/L		
% water PBT profiler				

Contaminant:	Profenofos
Substance Key:	34318
Contaminant ID (CASRN):	41198087

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	8	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 3.5

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00005**	**mg/kg-d**		**Inhibition of plasma & RBC ChE activity**	**Reference Dose; Basis = NOEL 0.005 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.0004	mg/kg-d	1990		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.05	mg/kg-d		Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 12,781,1987
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	162	mg/kg		Behavioral - somnolence (general depressed activity), Behavioral - tremor, Gastrointestinal - changes in structure or function of salivary glands	TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 73,16,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**879,776**	**lbs/yr**	**14**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	255	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0		Not Detected		Not Detected	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0		Not Detected		Not Detected	ug/L	

OPP Estimated Environmental Concentration	Surface water chronic: 0.1 ug/L	Ground water chronic: 0.03 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 3.5	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide, insecticide, acaricide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = biodegrades sometimes/recalcitrant; PBT
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.68	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.21E-08	atm-m^3/mol		
Water Solubility	28	mg/L		
% water PBT profiler	9			

Contaminant	Quinoline
Substance Key:	3467
Contaminant ID (CASRN):	91225

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.001**	**mg/L**	**2001**		**IRIS**
RAISHE Slope Factor	3	$(mg/kg-d)^{-1}$			IRIS
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2		2001		Hirao et al., 1976; oral study in rats
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART, EPA, RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.01	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	62	lbs/yr	1	States	2004	
TRI Release - total	**28,629**	**lbs/yr**	**8**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	Notes

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
	10K - 500K	lbs/yr	2002			

Use	Chemical intermediate; pharmaceutical (anti-malarial); flavoring (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades Fast with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	1,837	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.67E-06	atm-m3/mol		
Water Solubility	6,110	mg/L		
% water PBT profiler				

Contaminant:	RDX
Substance Key:	5404
Contaminant ID (CASRN):	121824

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	5	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/STORET 90%: 0.092
CAR HRL/STORET 90%: 0.0013

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.003	mg/kg-d	1988	Inflammation of the prostate.	Reference Dose; Basis NOEL 0.3 mg/kg-d. U.S. DOD, 1983
EPA HA RfD	0.003	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.003	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.03	mg/kg-d	6/1995		Int-Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	40	mg/kg-d		Cardiac - other changes, Blood - pigmented or nucleated red blood cells, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; 90-day study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year AD-A092-531
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.03**	**mg/L**	**1988**		**EPAHA**
RAISHE Slope Factor	0.11	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1988		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.1	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	ug/L			
Health Reference Level (HRL)[2] cancer	0.3	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental water data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
STORET	23	23	100	15	270	140	229	ug/L	
HRL Ratios (HRL/STORET 90%)	Non-cancer: 0.092				Cancer: 0.0013				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K - 1M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	High explosive			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = biodegrades fast with acclimation**
K_{OC}, Organic Carbon Partition Coefficient	**195.4**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.87	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.30E-08	atm-m^3/mol		
Water Solubility	59.7	mg/L		
% water PBT profiler				

Contaminant:	sec-Butylbenzene
Substance Key:	5904
Contaminant ID (CASRN):	135988

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	3	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 1.03

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**4.42**	**mg/kg-d**		**Behavioral - alteration of classical conditioning**	**Lowest Observed Adverse Effect Level; 24-week oral rat study; VCVGH "Vrednie chemichescie veshestva, galogenproisvodnie uglevodorodov". (Hazardous substances Galogenated hydrocarbons) Bandman A.L. et al., Chimia, 1990. Volume(issue)/page/year -,179,1990**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	2,240	mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	10.3	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,343**	**28**	**0.227**	**0.03**	**19.8**	**0.7**	**10**	**19.8**	**ug/L**	
NCOD Round 2 finished water	22,974	34	0.148	0.1	22	0.6	4.6	22	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	25	0.58	0.005	11	0.39	2.81	11	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 1.03				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Solvent for coating compositions, organic synthesis, plasticizer, and surface active agents (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	7,200	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.57	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.80E-02	atm-m^3/mol		
Water Solubility	17.6	mg/L		
% water PBT profiler	15			

Contaminant:	Strontium
Substance Key:	18848
Contaminant ID (CASRN):	7440246

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	5	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 3.88

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.6**	**mg/kg-d**	**1992**	**Rachitic bone**	**Reference Dose; Storey, 1961; Marie et al., 1985; Skoryna, 1981; UF = 300; Rat; Basis NOAEL = 190 mg/kg-d**
EPA HA RfD	0.6	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.6	mg/kg-d			Reference Dose; IRIS
ATSDR (ITER), MRL	2	mg/kg-d	2004	Musculo-skeletal effects	Minimal Risk Level; UF = 30; MRL-Int
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1993		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	20	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4,200	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**980**	**99.1**	**1.5**	**43,550**	**178**	**1,080**	**7,340**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 3.88	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Use data are for strontium carbonate: In pyrotechnics; steel production; catalyst; lead scavenger (HSDB); naturally-occurring

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; All use and env. fate data are for strontium carbonate; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		unitless		
Water Solubility	11	mg/L		
% water PBT profiler				

Contaminant:	Tebuconazole
Substance Key:	69191
Contaminant ID (CASRN):	107534963

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	9	6

3-model Categorical Prediction
L?-L
HRL Ratio(s)
NC HRL/GWC EEC: 9.09

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.029**	**mg/kg-d**	**2008**	**Decreased body weights, absolute brain weights, brain measurements and motor activity in offspring**	**Reference Dose; Basis = LOAEL 8.8 mg/kg-d; UF = 300. Federal Register: May 14, 2008 (Volume 74, Number 94), pp 27748-27756.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d	1994		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,000	mg/kg		Behavioral - food intake (animal)	Oral study - rabbit; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0545183
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	C		2008		OPP; 73 FR No. 94, pp 27748-27756.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**478,568**	**lbs/yr**	**16**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data

OPP Estimated Environmental Concentration	Surface water chronic: 14 ug/L	Ground water chronic: 23.1 ug/L

HRL Ratios (HRL/GWC EEC)	Non-cancer: 9.09				Cancer:	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	PBT; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.45E-10	atm-m^3/mol		
Water Solubility	36	mg/L		
% water PBT profiler	9			

Contaminant:	Tebufenozide
Substance Key:	69514
Contaminant ID (CASRN):	112410238

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 8.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.018**	**mg/kg-d**	**1999**	**Growth retardation, alterations in hematology parameters, changes in organ weights, and histopathological lesions in the bone, spleen and liver**	**Reference Dose; Basis NOAEL = 1.8 mg/kg-d, UF = 100. Federal Register: 64 FR, No. 203, pp 56690-56697, October 21, 1999.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d	2003	Effect on erythrocytes, periferal hemolytic anaemia. Gross and histopathological lesions in the spleen (congestion, pigment, and extra-medullary haematopoiesis)	Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	8.7	mg/kg-d		Blood - normocytic anemia, Blood - thrombocytopenia	Lowest Observed Adverse Effect Level; 1-year study in dog; FEREAC Federal Register. (U.S. Government Printing Office, Supt. of Documents, Washington, DC 20402) V.1- 1936- Volume(issue)/page/year 64,16851,1999
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	126	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**104,413**	**lbs/yr**	**17**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data						
OPP Estimated Environmental Concentration		Surface water chronic: 15 ug/L			Ground water chronic: 1.19 ug/L	
HRL Ratios (HRL/SWC EEC)		Non-cancer: 8.4			Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time	BST	PBT; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.26E-08	atm-m^3/mol		
Water Solubility	0.83	mg/L		
% water PBT profiler	11			

Contaminant:	Tellurium
Substance Key:	23035
Contaminant ID (CASRN):	13494809

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	4	9

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 0.673

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**25**	**mg/kg-d**		**Maternal toxicity**	**Supplemental Data; No Observed Effect Level; Johnson et al., 1988**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	20	mg/kg		Details of toxic effects not reported other than lethal dose value	Mouse; 85GMAT "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982 Volume(issue)/page/year -,107,1982
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**4**	**0.4**	**15**	**370**	**22**	**260**	**360**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.673	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Use data are for sodium tellurite: Bacteriology, medicine (HSDB); naturally-occurring

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assume persistent; All use and env. fate data are for sodium tellurite; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		unitless		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Terbufos
Substance Key:	22585
Contaminant ID (CASRN):	13071799

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 1.67

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00005**	**mg/kg-d**		**Plasma ChE inhibition**	**Reference Dose; Basis = NOAEL 0.005 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	0.00005	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.000025	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.0002	mg/kg-d	1989		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic? NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D		1988		Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.002	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	7,118	22	0.31	0.0021	0.56	0.017	0.21	0.56	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	6,515,603	lbs/yr	37	States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Notes	
PPMP ambient water		0	0		Not Detected		Not Detected	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0		Not Detected		Not Detected	ug/L	

	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	61	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	915	11	1.2	0.1	3.2	0.185	0.202	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 1.67	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	500-5,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.40E-05	atm-m^3/mol		
Water Solubility	5.07	mg/L		
% water PBT profiler	14			

Contaminant:	Terbufos sulfone
Substance Key:	37071
Contaminant ID (CASRN):	5607016

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1
Scores based on parent		Scores based on parent	

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 1.67 (NAWQA data and HRL for parent terbufos)

HEALTH EFFECTS DATA[1] - See parent Terbufos

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00005**	**mg/kg-d**		**Plasma ChE inhibition**	**Reference Dose - FOR PARENT TERBUFOS**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			**Based on data for parent terbufos**
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data	**FOR TERBUFOS - PARENT**									
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water		0							mg/L	
NCOD Round 2 finished water		0							mg/L	
NIRS finished water										
Ambient Water Occurrence Data	**FOR TERBUFOS - PARENT**									
NAWQA ambient water	7,118	22	0.31	0.0021	0.56	0.017	0.21	0.56	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data FOR TERBUFOS - PARENT	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	61	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
STORET	915	11	1.2	0.1	3.2	0.185	0.202	ug/L	
PPMP finished water		2	0.9		0.016			ug/L	Pesticide Pilot Montoring Program (USGS/EPA) **FROM TERBUFOS O-ANALOGUE SULFONE**
PPMP ambient water		0	0					ug/L	Pesticide Pilot Montoring Program (USGS/EPA) **FROM TERBUFOS O-ANALOGUE SULFONE**
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 1.67			Cancer:					**NAWQA data and HRL for Parent Terbufos**

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Pesticide degradate					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	length of time	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.21E-08	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	21			

Contaminant:	Thiodicarb
Substance Key:	38116
Contaminant ID (CASRN):	59669260

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 8.1 CAR HRL/SWC EEC: 0.07

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.03	mg/kg-d	1998	Extramedulary hematapoesis and decreased red blood cell cholinesterase activity	Reference Dose; Basis NOEL = 3.3 mg/kg-d (males) and 4.5 mg/kg-d (females); UF = 100; chronic rat study.
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d	2000		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.0188**	**$(mg/kg\text{-}d)^{-1}$**			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer	1.86	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**821,267**	**lbs/yr**	**27**	**States**	**1997**	
TRI Release - surface water	0.05	lbs/yr	1	States	2004	
TRI Release - total	1,430	lbs/yr	3	States	2004	
Supplemental Water Data						
OPP Estimated Environmental Concentration		Surface water chronic: 26 ug/L			Ground water chronic: 0 ug/L	
HRL Ratios (HRL/SWC EEC)		Non-cancer: 8.1			Cancer: 0.07	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.33E-07	atm-m^3/mol		
Water Solubility	35	mg/L		
% water PBT profiler	36			

Contaminant:	Thiophanate-methyl
Substance Key:	27753
Contaminant ID (CASRN):	23564058

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 45.9
CAR HRL/SWC EEC: 0.248

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.08	mg/kg-d	2004	Thyroid and liver effects and decreased body weight	Reference Dose; Basis NOEL = 8 mg/kg-d; UF = 100; chronic dog study.
EPA IRIS (ITER) RfD	0.08	mg/kg-d	1986	Decreased body weight, decreased spermatogenesis and histological evidence of hyperthyroidism	Reference Dose; Basis = NOEL 8 mg/kg-d; UF = 100.
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.08	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.08	mg/kg-d	1998		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.2	mg/kg-d		Endocrine - evidence of thyroid hypofunction, Endocrine - changes in thyroid weight, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; FEREAC Federal Register. (U.S. Government Printing Office, Supt. of Documents, Washington, DC 20402) V.1- 1936- Volume(issue)/page/year 67,14944,2002
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	2,270	mg/kg		Sense Organs and Special Senses (Eye) - mydriasis (pupillary dilation), Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold	TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 23,606,1972
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.0116**	**$(mg/kg\text{-}d)^{-1}$**			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				OPP
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Female & male reproductive toxicity	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	560	ug/L			
Health Reference Level (HRL)[2] cancer	3.02	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**453,792**	**lbs/yr**	**40**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	92	lbs/yr	3	States	2004	

Supplemental Water Data						
OPP Estimated Environmental Concentration	Surface water chronic: 12.2 ug/L				Ground water chronic: 3.03 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 45.9				Cancer: 0.248	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	14.32	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.4	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.94E-13	atm-m^3/mol		
Water Solubility	438.9	mg/L		
% water PBT profiler				

Contaminant:	Toluene diisocyanate
Substance Key:	29421
Contaminant ID (CASRN):	26471625

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL	30	mg/kg-d		Burns throat immediately.	No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	85.7	mg/kg-d		Related to Chronic Data - death	Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-251,1986
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50[1]		mg/kg			
CTDJPN Lowest Oral LD50[1]		mg/kg			
RTECS Lowest Oral LD50[1]		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.039**	**$(mg/kg\text{-}d)^{-1}$**			**Applies to mixture of 2,4- and 2,6- isomers.**
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; OEHHA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer	0.9	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	1	lbs/yr	1	States		
TRI Release - total	**129,143**	**lbs/yr**	**31**	**States**		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500M - 1B	lbs/yr	1998			
	>500M - 1B	lbs/yr	2002			
Use	In plastics manufacture (NTP)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	9,114	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.74	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.11E-05	atm-m^3/mol		
Water Solubility	37.57	mg/L		
% water PBT profiler	17			

Contaminant:	Tribufos
Substance Key:	2814
Contaminant ID (CASRN):	78488

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	9	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 3.89

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.001**	**mg/kg-d**		**Plasma ChE inhibition**	**Reference Dose; Basis = NOAEL 0.1 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.00003	mg/kg-d	1988		Reference Dose; Basis NOAEL 0.1 mg/kg-d; Abou-Donia et al., 1979
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.00003	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	4.08	mg/kg-d		Gastrointestinal - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other hydrolases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - peptidases	Lowest Observed Adverse Effect Level; 43 week study in rodent; FATOAO Farmakologiya i Toksikologiya (Moscow). For English translation, see PHTXA6 and RPTOAN. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.2- 1939- Volume(issue)/page/year 38,96,1975
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	77	mg/kg		Details of toxic effects not reported other than lethal dose value	85JCAE "Prehled Prumyslove Toxikologie; Organicke Latky," Marhold, J., Prague, Czechoslovakia, Avicenum, 1986 Volume(issue)/page/year -,1188,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**4,918,265**	**lbs/yr**	**16**	**States**	**1997**	
TRI Release - surface water	4	lbs/yr	1	States	2004	
TRI Release - total	7	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP ambient water		0	0					ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0					ug/L	

OPP Estimated Environmental Concentration	Surface water chronic 1.8 ug/L	Ground water chronic 0 ug/L	

HRL Ratios (HRL/SWC EEC)	Non-cancer: 3.89				Cancer:		
Production	**Amount Range**	**Units**	**Year**				
CUSIUR Production Data	10K - 500K	lbs/yr	1998				
	10K - 500K	lbs/yr	2002				
Use	Insecticide; cotton defoliant (HSDB)						

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = biodegrades fast
K_{OC}, Organic Carbon Partition Coefficient	1,888	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.94E-07	atm-m^3/mol		
Water Solubility	2.3	mg/L		
% water PBT profiler				

Contaminant:	Triethylamine
Substance Key:	5379
Contaminant ID (CASRN):	121448

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	10	9

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1**	**mg/kg-d**		**Brain and Coverings - other degenerative changes**	**Lowest Observed Adverse Effect Level; 30-week oral rat study; WDZAEK Weisheng Dulixue Zazhi. Journal of Health Toxicology. (Weisheng Dulixue Zazhi Bianjibu, Dongdaqiao, Chaoyang Menwai, Beijing, Peop. Rep. China) V.1- 1987 Volume(issue)/page/year 4,45,1990**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	460	mg/kg		Details of toxic effects not reported other than lethal dose value	AMIHBC AMA Archives of Industrial Hygiene and Occupational Medicine. (Chicago, IL) V.2-10, 1950-54. For publisher information, see AEHLAU. Volume(issue)/page/year 4,119,1951
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2.33	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	12,000	lbs/yr	14	States	2004	
TRI Release - total	**1,167,219**	**lbs/yr**	**35**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	lbs/yr	2002

Use	Chemical intermediate; stabilizer; in herbicides/pesticides; in consumer products; food additive; photographic chemical; in carpet cleaners (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	PBT; BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	107.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.45	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.49E-04	atm-m^3/mol		
Water Solubility	73,700	mg/L		
% water PBT profiler	46			

Contaminant:	Triphenyltin hydroxide (TPTH)
Substance Key:	2738
Contaminant ID (CASRN):	76879

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	10	6

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/SWC EEC: 0.33
CAR HRL/SWC EEC: 0.0003

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.0003	mg/kg-d	1999	Decreased white blood cells	Reference Dose; OPP RED
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.0005	mg/kg-d	1970		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.15	mg/kg-d		Blood - changes in other cell count (unspecified), Blood - changes in leukocyte (WBC) count	Lowest Observed Adverse Effect Level; 90-day study in guinea pig; FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 4,35,1966
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**18.3**	**$(mg/kg-d)^{-1}$**			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen; Developmental	UMD; CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2.1	ug/L			
Health Reference Level (HRL)[2] cancer	0.0019	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**660,971**	**lbs/yr**	**26**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data			**Notes**
OPP Estimated Environmental Concentration	Surface water chronic 6.4 ug/L	Ground water chronic 0 ug/L	

HRL Ratios (HRL/SWC EEC)	Non-cancer: 0.33	Cancer: 0.0003	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide (NTP)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	2,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.53	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.26E-07	atm-m^3/mol		
Water Solubility	0.4	mg/L		
% water PBT profiler				

Contaminant	Urethane
Substance Key:	2189
Contaminant ID (CASRN):	51796

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	7	6

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**0.9**	**mg/kg-d**	**2005**	**Decreased survival**	**Supplemental Data; Food and Chemical Toxicology 43 (2005) 1-19**
RTECS Lowest Oral Chronic LOAEL	78	mg/kg-d		Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight, Blood - changes in leukocyte (WBC) count	Lowest Observed Adverse Effect Level; 13 week oral study in rats; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NIH-96-3937
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	1	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1987		Vol. 7, Suppl. 7; 1987
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N		Developmental	IARC; CACART; OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	6.3	ug/L			
Health Reference Level (HRL)[2] cancer	0.035	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**96,050**	**lbs/yr**	**7**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Paint ingredient (NTP)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	PBT; BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.15	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.40E-08	atm-m^3/mol		
Water Solubility	480,000	mg/L		
% water PBT profiler	40			

Contaminant:	Vanadium
Substance Key:	18882
Contaminant ID (CASRN):	7440622

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	10	8

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/NIRS 90%: 0.913

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.007	mg/kg-d			Reference Dose; HEAST
ATSDR (ITER), MRL	**0.003**	**mg/kg-d**	**1992**	**Minor renal effects (altered renal function as indicated by increased plasma urea, and mild histological changes).**	**Minimal Risk Level; MRL-Int; UF = 100**
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value	1.8	mg/kg-d	2001	Kidney lesions and increases in plasma urea and uric acid	Supplemental Data; IOM 2001 Dietary Reference Intakes
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	960	mg/kg-d			Lowest Observed Adverse Effect Level; Domestic mammal
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**146**	**14.76**	**3.1**	**70.4**	**7.27**	**23**	**45**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.913				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Use data are for vanadium pentoxide: Chemical intermediate; catalyst; (HSDB); naturally-occurring

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; All use and env. fate data are for vanadium pentoxide; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	8,000	mg/L		
% water PBT profiler				

Contaminant:	Vinclozolin
Substance Key:	35005
Contaminant ID (CASRN):	50471448

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 8.94
CAR HRL/SWC EEC: 0.058

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.012	mg/kg-d		Histopathological lesions in the lungs, liver, ovaries & eyes. Q1* 0.0638 (mg/kg-day)-1. Group C. See CAR	Reference Dose; Basis = NOAEL 1.2 mg/kg-d; UF = 100.
EPA IRIS (ITER) RfD	0.025	mg/kg-d	1986		Reference Dose; Basis = NOEL 2.5 mg/kg-d; UF = 100.
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.025	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.01	mg/kg-d	1995		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor (oral)	**0.0638**	**$(mg/kg\text{-}d)^{-1}$**			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	84	ug/L			
Health Reference Level (HRL)[2] cancer	0.549	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**121,959**	**lbs/yr**	**26**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	
Supplemental Water Data						
OPP Estimated Environmental Concentration		Surface water chronic: 9.4 ug/L				Ground water chronic: 0 ug/L
HRL Ratios (HRL/SWC EEC)		Non-cancer: 8.94				Cancer: 0.058

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	289	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.1	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.33E-08	atm-m^3/mol		
Water Solubility	2.6	mg/L		
% water PBT profiler				

Contaminant:	Ziram
Substance Key:	5947
Contaminant ID (CASRN):	137304

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	7

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/SWC EEC: 56.6 **CAR HRL/SWC EEC: 0.288**

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.016	mg/kg-d		Decreased body weight gain	Reference Dose; Basis = NOAEL 1.6 mg/kg-d; UF = 100.
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.003	mg/kg-d	1996	Decreased body weight	Acceptable Daily Intake; Group ADI for Ferbam and Ziram
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
NOAEL	1.6	mg/kg-d			OPP
RTECS Lowest Oral Chronic LOAEL	1	mg/kg-d		Gastrointestinal - hypermotility, diarrhea	Lowest Observed Adverse Effect Level; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 17,S155,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
OPP Slope Factor	**0.0611**	**$(mg/kg-d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	Suggestive (not quantified)				
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	112	ug/L			
Health Reference Level (HRL)[2] cancer	0.57	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,992,552**	**lbs/yr**	**29**	**States**		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data						
OPP Estimated Environmental Concentration		Surface water chronic: 1.98 ug/L			Ground water chronic: 0.03 ug/L	
HRL Ratios (HRL/SWC EEC)		Non-cancer: 56.6			Cancer: 0.288	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>500K - 1M	lbs/yr	1998			
	>500K - 1M	lbs/yr	2002			
Use	Synthetic rubber chemical (NTP); fungicide					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades Fast with Acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.20E-10	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	(d)-Limonene
Substance Key:	17273
Contaminant ID (CASRN):	5989275

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	9	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NREC ASW MED: 700

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
IPCS-CICAD TDI	**0.1**	**mg/kg-d**		**Increased relative liver weight**	**IPCS Tolerable Daily Intake**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	500	mg/kg-d		Decreased body weight gain	Supplemental Data; NTP Study Report TR-347
RTECS Lowest Oral Chronic LOAEL	30	mg/kg-d	1993	Kidney, Ureter, Bladder - other changes in urine composition, Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; oral study in rat; FCTOD7 Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982- Volume(issue)/page/year 31,125,1993
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water			**6.39**			**1**			**ug/L**	**National Aggregate**
NREC ambient ground water			1.47			0.39			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NREC ASW MED)	Non-cancer: 700				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			

Use	Used in flavorings, fragrances, cosmetics, as a solvent, wetting agent and the manufacture of resins, insecticide, synthetic intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,300	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.57	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.026	atm-m^3/mol		
Water Solubility	13.8	mg/L		
% water PBT profiler	19			

Contaminant	(Hydroxyimino)cyclohexane
Substance Key:	4125
Contaminant ID (CASRN):	100641

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**17.86**	**mg/kg-d**		**Endocrine - changes in spleen weight, Blood - changes in erythrocyte (RBC) count, Blood - changes in leukocyte (WBC) count**	**Lowest Observed Adverse Effect Level; FAATDF Fundamental and Applied Toxicology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1-40, 1981-97. For publisher information, see TOSCF2 Volume(issue)/page/year 5,117,1985**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	41.7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.84	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.05E-06	atm-m^3/mol		
Water Solubility	18,000	mg/L		
% water PBT profiler	**44**			

Contaminant:	1,1,1-Trichloropropanone
Substance Key:	10061
Contaminant ID (CASRN):	918003

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
DBP ICR finished water			**53**		**16.97**	**1.7**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples w/ Detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., 2006 and related documentation	12	10	83	Not detected	7	0.8		ug/L	Finished drinking water monitoring; Krasner, et al., 2006. Env. Sci. & Technol., 40(23), pp. 7175-7185 (and related documentation).

HRL Ratios (no HRL data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	8.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.12	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.20E-06	atm-m^3/mol		
Water Solubility	7,450	mg/L		
% water PBT profiler	48			

Contaminant	1,1,2,2-Tetrachloroethane
Substance Key:	2878
Contaminant ID (CASRN):	79345

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	5	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 0.13

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	**0.00005**	**mg/kg-d**		**Decreased body weights; increased white blood cell counts, hepatic fat content and pituitary ACTH content**	**Reference Dose**
RAISHE RfD	0.06	mg/kg-d		Hepatocellular vacuolization and increases in absolute and relative	Reference Dose; Basis NOAEL rat, Microbioligical Associates, 1994. UF = 300
ATSDR (ITER), MRL	0.04	mg/kg-d	1996		Minimal Risk Level; Basis LOAEL 43, rat, NCI 1987; UF = 1,000
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.02	mg/L			
RAISHE Slope Factor	0.2	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.27	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification	3		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAISHE; OEHHA; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.002	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**20,407**	**91**	**0.446**	**0.05**	**200**	**0.5**	**2.74**	**112**	**ug/L**	
NCOD Round 2 finished water	24,800	19	0.0766	0.1	2	0.5	1.5	2	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,317	3	0.069	0.02	0.38	0.14	0.38	0.38	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	3,185	lbs/yr	5	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	134	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 0.13	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Industrial solvent; former pesticide; in manufacture of paints, varnish, rust removers; in soil sterilization and weed killer, insecticide formulations; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	≥58 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	106.8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.39	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00037	atm-m^3/mol		
Water Solubility	2,870	mg/L		
% water PBT profiler				

Contaminant	1,2,3,4-Tetrahydronaphthalene
Substance Key:	5285
Contaminant ID (CASRN):	119642

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	7	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**2,860**	**mg/kg**	**1982**	**Cataract**	**Ref: Hayes, Wayland J., Jr. Pesticides Studied in Man. Baltimore/London: Williams and Wilkins 1982., p.122**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Industrial solvent; paint remover; insecticide (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	1,800	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0017	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**23**			**PBT**

Contaminant	1,2,3-Trichlorobenzene
Substance Key:	3257
Contaminant ID (CASRN):	87616

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	5	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 18

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.0015	mg/kg-d	1992		Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**7.7**	**mg/kg-d**		**Mild to moderate histopathological changes in the liver, thyroid and kidney**	**Supplemental Data; ITER. Ref: HC 2004. Basis NOEL, rat, Cote, et al., 1988. UF = 5000**
RTECS Lowest Oral Chronic LOAEL	77.1	mg/kg-d	1988	Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; oral study in rat; DCTODJ Drug and Chemical Toxicology. (Marcel Dekker, 270 Madison Ave., New York, NY 10016) V.1- 1977/78- Volume(issue)/page/year 11,11,1988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	53.9	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,876**	**63**	**0.489**	**0.04**	**15**	**0.5**	**3**	**15**	**ug/L**	
NCOD Round 2 finished water	22,532	43	0.191	0.03	2.4	0.5	1.4	2.4	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	3	0.07	0.02	0.102	0.068	0.102	0.102	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,833	6	0.05	0.6	7	0.7	6.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 18	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
		lbs/yr	2002			

Use	Industrial solvent; chemical intermediate; termite control (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	2,500-63,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.05	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0012	atm-m^3/mol		
Water Solubility	18	mg/L		
% water PBT profiler				

Contaminant	1,2,4,5-Tetrachlorobenzene
Substance Key:	3799
Contaminant ID (CASRN):	95943

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0003**	**mg/kg-d**	**1987**	**Kidney lesions**	**Reference Dose; Basis NOAEL = 0.34, rat, Chu et al. 1984. UF = 1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.003	mg/kg-d			Reference Dose; Basis NOAEL, rat, Chu et al. 1984. UF = 1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.00021	mg/kg-d	1992		Tolerable Daily Intake; ITER. Basis NOAEL = 2.1 mg-kg/d, rat, NTP 1991. UF = 10,000
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.0432	mg/kg-d	1988	Liver - changes in liver weight	Lowest Observed Adverse Effect Level; oral study in mouse; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB92-128388
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2.1	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1998**
		lbs/yr	2002

Use	Chemical intermediate for herbicides; former insecticide (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**1,186**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	4.64	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.001	atm-m^3/mol		
Water Solubility	0.595	mg/L		
% water PBT profiler				

Contaminant	1,2,4-Trimethylbenzene
Substance Key:	3775
Contaminant ID (CASRN):	95636

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	6	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 35

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.05**	**mg/kg-d**		**dec in body wt gain; clinical observations; inc liver/kidney wt**	**Reference Dose; Basis NOAEL, rat, IITRI 1995. UF = 3000.**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	100	mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	114	mg/kg-d	1993	Peripheral Nerve and Sensation - recording from afferent nerve, Peripheral Nerve and Sensation - recording from peripheral motor nerve, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; oral study in rat; JJATDK JAT, Journal of Applied Toxicology. (John Wiley & Sons Ltd., Baffins Lane, Chichester, W. Sussex PO19 1UD, UK) V.1- 1981- Volume(issue)/page/year 13,123,1993
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N	1987		EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,755**	**106**	**0.831**	**0.02**	**77**	**1**	**10**	**65.6**	**ug/L**	
NCOD Round 2 finished water	22,968	177	0.771	0.1	137	0.8	5.6	70.6	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,233	473	11.2	0.003	260	0.024	0.201	10	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	5,676	lbs/yr	37	States	2004	
TRI Release - total	7,700,757	lbs/yr	54	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,886	35	0.29	0.5	19	1	5.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 350	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			

Use	Chemical intermediate; vermifuge (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	718	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.63	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0062	atm-m^3/mol		
Water Solubility	0.252	mg/L		
% water PBT profiler	57			

Contaminant	1,2-Diphenylhydrazine
Substance Key:	5454
Contaminant ID (CASRN):	122667

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.005**	**mg/L**			**IRIS**
RAISHE Slope Factor	0.8	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)	0.87	$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2		1986		
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS; OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.05	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	5	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	65	0	0	Not Detected	Not Detected	Not Detected	Not Detected		Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Chemical intermediate; evaluated as insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	3,481	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.38E-09	atm-m^3/mol		
Water Solubility	221	mg/L		
% water PBT profiler				

Contaminant	1,2-Epoxy-4-(epoxyethyl)cyclohexane
Substance Key:	4566
Contaminant ID (CASRN):	106876

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
	8	1	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1994		Vol. 60; cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART; Clear evidence of carcinogenicity in male and female rats and mice (NTP).
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	**10K - 500K**	**lbs/yr**	**1990**			
		lbs/yr	2002			
Use	Chemical and polymer intermediate (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.44	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.42E-07	atm-m^3/mol		
Water Solubility	35,200	mg/L		
% water PBT profiler	**42**			

Contaminant	1,3-Cyclopentadiene
Substance Key:	7730
Contaminant ID (CASRN):	542927

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	6	8

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**113**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0535718**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7.91	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**89.7**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00793	atm-m^3/mol		
Water Solubility	471	mg/L		
% water PBT profiler				

Contaminant	1,3-Dibromo-5,5-dimethylhydantoin
Substance Key:	2748
Contaminant ID (CASRN):	77485

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	3	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.437**	**mg/kg-d**		**Endocrine - evidence of thyroid hypofunction**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 36(10),108,1971**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	250	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.02	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>1M-10M	lbs/yr	1998							
	>500K-1M	**lbs/yr**	**2002**							
Use	Molluscicide; slimicide (ChemIDPlus)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient		L/kg								
log K_{OW}, Octanol Water Partition Coeff.	-0.94	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant		atm-m^3/mol								
Water Solubility		mg/L								
% water PBT profiler	**51**									

Contaminant	1,3-Dichloropropene
Substance Key:	7722
Contaminant ID (CASRN):	542756

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	4	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 97.2
CAR HRL/NCOD R1 90%: 0.16

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.025	mg/kg-d		Decreased body weight gain and increased incidence of basal cell hyperplasia of the nonglandular mucosa of the stomach	Reference Dose; Stott, et al. 1995
EPA IRIS (ITER) RfD	0.02	mg/kg-d		forestomach	Reference Dose, Stott et al., 1995, Basis BMD = 2.2 mg/kg-d, rat, UF = 100
EPA HA RfD	0.03	mg/kg-d			Reference Dose
RAISHE RfD	0.03	mg/kg-d		chronic irritation	Reference Dose, Stott et al., 1995, BMDL/BMD, rat, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.5	mg/kg-d	1974	Gastrointestinal - changes in structure or function of endocrine pancreas, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other hydrolases	Lowest Observed Adverse Effect Level; 26-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 39(1),94,1974
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.04	mg/L			
RAISHE Slope Factor	0.1	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.091	$(mg/kg\text{-}d)^{-1}$			
OPP Slope Factor	**1.22**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		2000		
IARC Carcinogen Classification	2B		1999		Vol. 41, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, RAISHE, OEHHA, OPP, IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	1	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	ug/L			
WHODWQ	20	ug/L			Substance Guideline Value; For excess risk of 10-5
Health Reference Level (HRL)[2] cancer	0.287	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	9,164	15	0.16	0.5	2.0	**1.0**	1.8	2.0	ug/L	
NCOD Round 2 finished water	16,787	58	**0.35**	0.2	39.0	0.5	0.99	39.0	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	34,717,237	lbs/yr	20	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	4,471	lbs/yr	9	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	12,117	4	0.03	0.86	130	2.8	92.1	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 97.2				Cancer: 0.16				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	pesticide; in organic synthesis (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	80.8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00355	atm-m^3/mol		
Water Solubility	2,800	mg/L		
% water PBT profiler	41			

Contaminant	1,3-Diisopropylbenzene
Substance Key:	4042
Contaminant ID (CASRN):	99627

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	5	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.25**	**mg/kg-d**		**Behavioral - muscle contraction or spasticity, Behavioral - alteration of classical conditioning, Blood - changes in erythrocyte (RBC) count**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 36(9),18,1971**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,100	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.58	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States						
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>1M-10M	lbs/yr	1998							
	>1M-10M	**lbs/yr**	**2002**							
Use	Chemical intermediate; solvent (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**38**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient		L/kg								
log K_{OW}, Octanol Water Partition Coeff.	4.9	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	2.00E-02	atm-m^3/mol								
Water Solubility	4.33	mg/L								
% water PBT profiler	**8**									

Contaminant	1,4-Benzoquinone dioxime
Substance Key:	4434
Contaminant ID (CASRN):	105113

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	3	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**5.94**	**mg/kg-d**	**1964**	**Behavioral - alteration of classical conditioning, Nutritional and Gross Metabolic - weight loss or decreased weight gain, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 29(10),15,1964**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 29, Suppl. 7; Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	13.9	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
	>500K-1M	**lbs/yr**	**2002**			

Use	Rubber additive (HSDB)			

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.49	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.74E-10	atm-m^3/mol		
Water Solubility	4,550	mg/L		
% water PBT profiler	**29**			

Contaminant	1,4-Butanediol
Substance Key:	4866
Contaminant ID (CASRN):	110634

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	7	9	5

3-model Categorical Prediction
NL?-L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI	0.125	mg/kg-d			Acceptable Daily Intake; No severity information is available; Potency/Severity scored on CTDJPN NOEL.
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**400**	**mg/kg-d**		**Reproductive and developmental toxicity**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	30	mg/kg-d	1968	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase, Biochemical - Metabolism (Intermediary) - other carbohydrates	Lowest Observed Adverse Effect Level; oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 33(1),37,1968
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,200	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,800	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>500M-1B	lbs/yr	1998			
	>500M-1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; humectant, pharmaceuticals (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	18	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.30E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**40**			

Contaminant	1,4-Butynediol
Substance Key:	4868
Contaminant ID (CASRN):	110656

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**2**	**mg/kg-d**	**1968**	**Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase, Biochemical - Metabolism (Intermediary) - other carbohydrates**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 33(1),37,1968**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	100	mg/kg	1984	Details of toxic effects not reported other than lethal dose value	VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,153,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4.67	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>100M-500M	lbs/yr	1998							
	>100M-500M	**lbs/yr**	**2002**							
Use	Chemical intermediate (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**8.7 days**	**length of time**	**BF**	**BF = Biodegrades fast (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg								
log K_{OW}, Octanol Water Partition Coeff.	-0.93	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	1.70E-11	atm-m^3/mol								
Water Solubility		mg/L								
% water PBT profiler	**36**									

Contaminant	1,4-Cyclohexanedimethanol
Substance Key:	4431
Contaminant ID (CASRN):	105088

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,600**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**KODAK Kodak Company Reports. (343 State St., Rochester, NY 14650) Volume(issue)/page/year 21MAY1971**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>100M-500M	lbs/yr	1998							
	>50M-100M	**lbs/yr**	**2002**							
Use	Chemical intermediate; in films and coatings (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient		L/kg								
log K_{OW}, Octanol Water Partition Coeff.		unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant		atm-m^3/mol								
Water Solubility		mg/L								
% water PBT profiler	**36**									

Contaminant	1,5,9-Cyclododecatriene
Substance Key:	16316
Contaminant ID (CASRN):	4904614

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	7	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,780**	**mg/kg**		**Behavioral - tremor**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0557883**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>50M-100M	**lbs/yr**	**2002**

Use	Specialty petrochemical (NLM TOXNET)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.99E-01	atm-m^3/mol		
Water Solubility	0.39	mg/L		
% water PBT profiler	**13**			

Contaminant	11-Aminoundecanoic acid
Substance Key:	13315
Contaminant ID (CASRN):	2432997

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	5	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**750**	**mg/kg-d**	**1982**	**Kidney, Ureter, Bladder - other changes**	**Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-216,1982**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,750	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Polymer initiator (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000	mg/L		
% water PBT profiler	**41**			

Contaminant	1-Amino-2,4-dibromoanthraquinone
Substance Key:	2996
Contaminant ID (CASRN):	81492

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	8	1	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**90**	**mg/kg-d**		**Blood - leukemia, Tumorigenic - active as anti-cancer agent**	**Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB97-116636. 104-week rat study.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	**10K - 500K**	**lbs/yr**	**1986**			
		lbs/yr	2002			
Use	Dye intermediate (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	18,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.31	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.78E-13	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**5**			

Contaminant	1-Decanol
Substance Key:	5018
Contaminant ID (CASRN):	112301

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	7	3

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**4,720**	**mg/kg**		**Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea**	**AIHAAP American Industrial Hygiene Association Journal. (AIHA, 475 Wolf Ledges Pkwy., Akron, OH 44311) V.19- 1958- Volume(issue)/page/year 34,493,1973**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>50M-100M	lbs/yr	1998							
	>50M-100M	**lbs/yr**	**2002**							
Use	Pesticide; chemical intermediate (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**						
K_{OC}, Organic Carbon Partition Coefficient	7,300	L/kg								
log K_{OW}, Octanol Water Partition Coeff.	4.57	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	3.20E-05	atm-m^3/mol								
Water Solubility	37	mg/L								
% water PBT profiler	**23**									

Contaminant	1-Dodecanol
Substance Key:	5039
Contaminant ID (CASRN):	112538

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	3

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,170**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,119,1984**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Pesticide; chemical intermediate; food additive (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	15,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.13	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.22E-05	atm-m^3/mol		
Water Solubility	4	mg/L		
% water PBT profiler	**16**			

Contaminant	1-Heptanol
Substance Key:	4965
Contaminant ID (CASRN):	111706

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	6	3	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.025**	**mg/kg-d**		**Brain and Coverings - other degenerative changes, Liver - other changes, Kidney, Ureter, Bladder - other changes**	**Lowest Observed Adverse Effect Level; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,113,1994**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	500	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.058	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	10K-500K	lbs/yr	1998
	>500K-1M	**lbs/yr**	**2002**

Use	Chemical intermediate; solvent; cosmetic formulations; food additive (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	74	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.62	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.88E-05	atm-m^3/mol		
Water Solubility	1,670	mg/L		
% water PBT profiler	**28**			

Contaminant	1-Hexene
Substance Key:	8242
Contaminant ID (CASRN):	592416

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	9	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1,000**	**mg/kg-d**	**2000**	**Kidney, ureter, bladder, - changes in tubules including acute renal failure, acute tubilar necrosis**	**Lowest Observed Adverse Effect Level, DCTODJ Drug and Chemical Toxicology. (Marcel Dekker, 270 Madison Ave., New York, NY 10016) V.1- 1977/78- Volume(issue)/page/year 23,327,2000< LOAEL, rat**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,333	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>500M-1B	lbs/yr	1998
	>500M-1B	**lbs/yr**	**2002**

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**8.7 days**	**length of time**	**BF**	**BF = Biodegrades fast (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	1,660	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.39	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.41	atm-m^3/mol		
Water Solubility	50	mg/L		
% water PBT profiler	**78**			

Contaminant	1-Pentanol
Substance Key:	2564
Contaminant ID (CASRN):	71410

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	6	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**200**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,107,1984**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Industrial solvent; synthetic flavoring agent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**4.51**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.51	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.30E-05	atm-m^3/mol		
Water Solubility	22,000	mg/L		
% water PBT profiler				

Contaminant	1-Propanol
Substance Key:	2560
Contaminant ID (CASRN):	71238

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	8	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**600**	**mg/kg-d**	**1970**	**Endocrine - changes in adrenal weight**	**Lowest Observed Adverse Effect Level; BIOFX BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets. (1810 Frontage Rd., Northbrook, IL 60062) Volume(issue)/page/year 15-4/1970**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,870	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Solvent; chemical intermediate; former pesticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	33	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.41E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**46**			

Contaminant	2-(Dimethylamino)ethyl acrylate
Substance Key:	13333
Contaminant ID (CASRN):	2439352

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**4**	**mg/kg-d**		**Epithelial hyperplasia of the forestomach; hematological effects; decreased body weight gain.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	455	mg/kg		Lungs, Thorax, or Respiration - other changes	rat study; EPASR United States Environmental Protection Agency, Office of Pesticides and Toxic Substances. (U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460) History unknown. Volume(issue)/page/year 8EHQ-1190-1119
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			
Use	Industrial Chemical (EPA/SRS)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**44**			

Contaminant	2,3-Dibromopropanol
Substance Key:	3812
Contaminant ID (CASRN):	96139

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	1	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL/No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**681**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0528372**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States						
TRI Release - total		lbs/yr		States						
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No HRL/No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data		lbs/yr								
	10K-500K	**lbs/yr**	**1990**							
Use	Chemical intermediate for flame retardants, insecticides, and pharmaceuticals (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient	4	L/kg								
log K_{OW}, Octanol Water Partition Coeff.		unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	6.30E-08	atm-m^3/mol								
Water Solubility	52,000	mg/L								
% water PBT profiler	**36**									

Contaminant	2,4,5-Trichlorophenol
Substance Key:	3800
Contaminant ID (CASRN):	95954

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	2	5

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**	**1985**	**Liver & kidney pathology (degenerative changes)**	**Reference Dose; McCollister et al., 1961. Basis NOEL 100, rat, UF = 1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.1	mg/kg-d			Reference Dose; McCollister et al., 1961. Basis NOEL/LOEL, rat, UF = 1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.003	mg/kg-d	2000	Immune system	Tolerable Daily Intake; Exon and Koller, 1985. Basis NOAEL, rat.
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	72	mg/kg-d	1972	Liver - other changes, Liver - changes in liver weight	Lowest Observed Adverse Effect Level; oral study in mouse; CMSHAF Chemosphere. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.1- 1972- Volume(issue)/page/year 1,153,1972
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	600	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	4,689	lbs/yr	1	States	2004	
TRI Release - total	**18,879**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide, bactericide; industrial preservative; chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1,186	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.72	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.62E-06	atm-m^3/mol		
Water Solubility	1,200	mg/L		
% water PBT profiler				

Contaminant	2,4,6-Trichlorophenol
Substance Key:	3282
Contaminant ID (CASRN):	88062

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	7	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	**0.0003**	**mg/kg-d**		**Increased pups liver weight**	**Reference Dose; EPA Health Advisory**
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.003	mg/kg-d		Immune system	Tolerable Daily Intake; Exon and Koller, 1985. Basis NOAEL, rat.
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	240	mg/kg-d	1990	Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol)	Lowest Observed Adverse Effect Level; oral study in rat; JACTDZ Journal of the American College of Toxicology. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1-12, 1982-1993. Discontinued. Volume(issue)/page/year 9(5),497,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.3	mg/L			
RAISHE Slope Factor	0.011	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)	0.07	$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAISHE; OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.01	mg/L	1994		Drinking Water Equivalent Level
WHODWQ	200	mg/L			World Health Organization Drinking Water Guideline Value
Health Reference Level (HRL)[2]	2.1	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**294**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	1,728	lbs/yr	3	States	2004	
TRI Release - total	1,906	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	210	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Fungicide, bactericide; industrial preservative; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	1,186	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.69	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.59E-06	atm-m^3/mol		
Water Solubility	800	mg/L		
% water PBT profiler				

Contaminant	2,4-Dimethylphenol
Substance Key:	4471
Contaminant ID (CASRN):	105679

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.02**	**mg/kg-d**	**1990**	**Clinical signs (lethargy, prostration, ataxia) & hematological changes**	**Reference Dose; U.S. EPA, 1989. Basis NOAEL 50, mouse.**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d		Lethargy, prostration, ataxia, hematological changes	Reference Dose; U.S. EPA, 1989. Basis NOAEL/LOAEL, mouse, UF = 3000.
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	100	mg/kg-d	1995	Kidney, Ureter, Bladder - changes in kidney weight	Lowest Observed Adverse Effect Level; oral study in rat; TOBHB TAT Toxikologische Bewertung. Heidelberg, Berufsgenossenschaft der chemischen Industrie Volume(issue)/page/year VI137,1,1995
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	809	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	1,137	lbs/yr	10	States	2004	
TRI Release - total	**168,992**	**lbs/yr**	**15**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	171	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:			Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	As a disinfectant/bacteriocide/germicide; chemical intermediate for pharmaceuticals and pesticides; former insecticide/biocide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	718	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.52E-07	atm-m^3/mol		
Water Solubility	7,870	mg/L		
% water PBT profiler				

Contaminant	2,4-Dinitrophenol
Substance Key:	2166
Contaminant ID (CASRN):	51285

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.002**	**mg/kg-d**	**1986**	**cataract formation in humans**	**Reference Dose; Horner, 1942. Basis LOAEL, human**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		cataract formation	Reference Dose; Horner, 1942. Basis LOAEL, human, UF = 1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	10	mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.0006	mg/kg-d	1966	Blood - other changes	Lowest Observed Adverse Effect Level; oral study in rabbit; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 31(6),3,1966
Supplemental LOAEL	2	mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	49	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**294**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	502	lbs/yr	1	States	2004	
TRI Release - total	649	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS	134	0	0	Not Detected	Not Detected	Not Detected	Not Detected		Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Chemical intermediate; former pesticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	364	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.67	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.61E-08	atm-m^3/mol		
Water Solubility	2,790	mg/L		
% water PBT profiler				

Contaminant	2,4-Dinitrotoluene
Substance Key:	5365
Contaminant ID (CASRN):	121142

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	10

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/UCMR 90%: 0.042
CAR HRL/UCMR 90%: 0.00015

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.002	mg/kg-d	1998	Neurotoxicity, hematological, and bilary effects	Reference Dose; Ellis et al., 1985 Basis NOAEL 0.2, dog.
EPA HA RfD	0.002	mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		Neurotoxicity, heinz bodies, and bilary tract hyperplasia	Reference Dose; Ellis et al., 1985 Basis NOAEL, dog. UF = 100
ATSDR (ITER), MRL	0.002	mg/kg-d	1998	Hematological	Minimal Risk Level. Ellis et al., 1979, 1985 Basis NOAEL, dog.
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.896	mg/kg-d	1985	Blood - normocytic anemia, Blood - methemoglobinemia-carboxyhemoglobin, Blood - changes in other cell count (unspecified)	Lowest Observed Adverse Effect Level; oral study in mouse; JACTDZ Journal of the American College of Toxicology. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1-12, 1982-1993. Discontinued. Volume(issue)/page/year 4(4),257,1985
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.005**	**mg/L**			**EPAHA**
RAISHE Slope Factor	0.68	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.31	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Repro	CACART
EPAHA-DWEL	0.1	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	ug/L			
Health Reference Level (HRL)[2] cancer	0.05	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,621**	**1**	**0.028**	**333**	**333**	**333**	**333**	**333**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	14	lbs/yr	1	States	2004	
TRI Release - total	6,702	lbs/yr	4	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	2,614	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/UCMR 90%)	Non-cancer: 0.042				Cancer: 0.00015				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
	10K-500K	lbs/yr	2002			
Use	Chemical intermediate; in propellants (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	364	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.98	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.41E-08	atm-m^3/mol		
Water Solubility	270	mg/L		
% water PBT profiler				

Contaminant	2,4-Toluenediamine
Substance Key:	3790
Contaminant ID (CASRN):	95807

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	2	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	50	mg/kg-d	1987	Kidney, Ureter, Bladder - other changes, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; oral study in rat; TAEHC Environmental Health Criteria (United Nations Environment Programme. Geneva, World Health Organization) 1- 1976- Volume(issue)/page/year -,1,1987
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	3.2	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**3.8**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAIS; OEHHA; EPA; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	117	ug/L			
Health Reference Level (HRL)[2] cancer	0.0092	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**11,834**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	10K-500K	lbs/yr	2002			
Use	Chemical intermediate; in dyes and photographic developers (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	120	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.14	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.52E-10	atm-m^3/mol		
Water Solubility	74,800	mg/L		
% water PBT profiler				

Contaminant	2,5-Xylenol
Substance Key:	3795
Contaminant ID (CASRN):	95874

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**383**	**mg/kg**	**1968**	**Behavioral - ataxia, Behavioral - muscle contraction or spasticity, Lungs, Thorax, or Respiration - dyspnea**	**HYSAAV Hygiene and Sanitation (USSR). English translation of GISAAA. (Springfield, VA) 1964-71. Discontinued. Volume(issue)/page/year 33(7-9),329,1968. Mouse study.**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Petroleum antioxidant; chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	440	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.33	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.10E-06	atm-m^3/mol		
Water Solubility	3,540	mg/L		
% water PBT profiler	**29**			

Contaminant	2,6-Dimethylphenol
Substance Key:	8028
Contaminant ID (CASRN):	576261

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0006**	**mg/kg-d**	**1988**	**Body weight & blood pressure changes; changes in protein sulfhydryl groups in blood serum & internal organs; histopathological changes in liver, kidney & spleen.**	**Reference Dose; Veldre and Janes, 1979. Basis NOEL, rat**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0006	mg/kg-d		body weight changes, histopathological changes of internal organs	Reference Dose; Veldre and Janes, 1979. Basis NOEL/LOEL, rat, UF = 1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	0.6	mg/kg-d		Liver, kidney, spleen	Supplemental Data; ITER; Veldre and Janes, 1979. Basis NOEL/LOEL, rat, UF = 1000
RTECS Lowest Oral Chronic LOAEL	6	mg/kg-d	1968	Liver - other changes, Blood - changes in spleen, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol)	Lowest Observed Adverse Effect Level; oral study in rat; HYSAAV Hygiene and Sanitation (USSR). English translation of GISAAA. (Springfield, VA) 1964-71. Discontinued. Volume(issue)/page/year 33(7-9),329,1968
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	296	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4.2	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**733**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.36	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.66E-06	atm-m^3/mol		
Water Solubility	6,050	mg/L		
% water PBT profiler				

Contaminant	2,6-Xylidine
Substance Key:	3258
Contaminant ID (CASRN):	87627

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	2	4

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**24**	**mg/kg-d**		**Decreased survival and decreased body weights, deceases in red blood cell count, hemoglobin and hematocrit positive for cancer in male and female rats Mice not tested.**	**Supplemental Data; NTP; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-278,1990**
RTECS Lowest Oral Chronic LOAEL	221	mg/kg-d	1990	Brain and Coverings - changes in brain weight, Liver - changes in liver weight, Blood - changes in other cell count (unspecified)	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-278,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; Note: Tested positive for cancer in male and female rats (NTP)
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	168	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	2,938	lbs/yr	1	States	2004	
TRI Release - total	**5,256**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
		lbs/yr	2002			
Use	Chemical intermediate; pesticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST - Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	52	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.84	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.50E-06	atm-m^3/mol		
Water Solubility	8,200	mg/L		
% water PBT profiler	35			

Contaminant	2-Chloro-1-propanol
Substance Key:	2842
Contaminant ID (CASRN):	78897

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	9	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	75	mg/kg-d	1994	Nutritional and Gross Metabolic - weight loss or decreased weight gain, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; oral study in rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,185,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**111**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value.**	**Clayton, GD., FE. Clayton (eds). Pattys Industrial Hygiene and Toxicology. Volumes 2A, 2B, 2C, 2D, 2E, 2F: Toxicology 4th ed. New York, NY: John Wiley & Sons, Inc., 1993-1994 p. 2736**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States						
TRI Release - surface water		lbs/yr		States						
TRI Release - total		lbs/yr		States						
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No HRL/No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data		lbs/yr								
	>500M-1B	**lbs/yr**	**1986**							
Use	Chemical intermediate (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient	2	L/kg								
log K_{OW}, Octanol Water Partition Coeff.		unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	1.70E-06	atm-m^3/mol								
Water Solubility		mg/L								
% water PBT profiler	**43**									

Contaminant	2-Ethyl-3-propylacrolein
Substance Key:	9266
Contaminant ID (CASRN):	645625

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**3,000**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**JIHTAB Journal of Industrial Hygiene and Toxicology. (Cambridge, MA) V.18-31, 1936-49. For publisher information, see AEHLAU. Volume(issue)/page/year 26,269,1944**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Chemical intermediate for insecticides and other organics (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	70	mg/L		
% water PBT profiler	**24**			

Contaminant	2-Ethylhexanal
Substance Key:	5484
Contaminant ID (CASRN):	123057

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**2,600**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0534445, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Chemical intermediate; disinfectant (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	160	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00076	atm-m^3/mol		
Water Solubility	400	mg/L		
% water PBT profiler	**25**			

Contaminant	2-Ethylhexanoic acid
Substance Key:	6263
Contaminant ID (CASRN):	149575

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	7	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**61**	**mg/kg-d**		**increased liver weight, hepatocyrte hypertrophy cytoplamic vacuolization**	**Supplemental Data; Publication Juberg, et al., 1998**
RTECS Lowest Oral Chronic LOAEL	629	mg/kg-d		Behavioral - somnolence (general depressed activity), Liver - changes in liver weight, Skin and Appendages - hair	Lowest Observed Adverse Effect Level; oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0525547
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,000	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	427	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Cosolvent and defoamer in pesticides; chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	650	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.64	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.90E-06	atm-m^3/mol		
Water Solubility	1,400	mg/L		
% water PBT profiler	**28**			

Contaminant	2-Ethylhexanol
Substance Key:	4405
Contaminant ID (CASRN):	104767

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	125	mg/kg-d		Decreased body weight, increased liver, kidney, stomach and testes weights, microscopic changes in the liver and forestomach	Supplemental Data; Publication Astill er al, 1996
RTECS Lowest Oral Chronic LOAEL	**100**	**mg/kg-d**	**1994**	**Liver - other changes**	**Lowest Observed Adverse Effect Level; oral study in rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,116,1994. The LOAEL was used for Potency scoring because it was lower than the NO(A)EL from other studies.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	2,053	mg/kg			WHO: Environ Health Criteria Number 32: Toxicological Evaluation of Certain Food Additives and Contaminants. P. 39 (1993)
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	233	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>500M-1B	lbs/yr	1998
	>500M-1B	**lbs/yr**	**2002**

Use	Solvent; plasticizer; wetting agent; dry cleaning (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	105	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.65E-05	atm-m^3/mol		
Water Solubility	880	mg/L		
% water PBT profiler	**27**			

Contaminant	2-Ethylhexenal
Substance Key:	29251
Contaminant ID (CASRN):	26266682

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**2,005**	**mg/kg**	**1988**	**Behavioral - altered sleep time, chages in motor activity, muscle contraction and spasticity (including change in righting reflex)**	**GTPZAB, rodent-rat; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 32(3),48,1988**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No HRL/No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	**>100M-500M**	**lbs/yr**	**1990**							
		lbs/yr	2002							
Use	Industrial chemical (EPA/SRS)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient		L/kg								
log K_{OW}, Octanol Water Partition Coeff.		unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant		atm-m^3/mol								
Water Solubility		mg/L								
% water PBT profiler	**24**									

Contaminant	2-Ethylhexyl acrylate
Substance Key:	4286
Contaminant ID (CASRN):	103117

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**3**	**mg/kg-d**		**Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year -,16,1993**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	4,400	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States						
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>100M-500M	lbs/yr	1998							
	>100M-500M	**lbs/yr**	**2002**							
Use	As monomer; in paints (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient	430	L/kg								
log K_{OW}, Octanol Water Partition Coeff.	4.09	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	0.00043	atm-m^3/mol								
Water Solubility	100	mg/L								
% water PBT profiler	**17**									

Contaminant	2-Ethylhexyl thioglycolate
Substance Key:	19121
Contaminant ID (CASRN):	7659861

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	6	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**303**	**mg/kg**	**1974**	**Details of toxic effects not reported other than lethal dose value**	**(ZHYGAM Zeitschrift fuer die Gesamte Hygiene und Ihre Grenzgebiete. (VEB Verlag Volk und Gesundheit, Neue Gruenstr. 18, Berlin DDR-1020, Ger. Dem. Rep.) V.1- 1955- Volume(issue)/page/year 20,575,1974)**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**22**			

Contaminant	2-Hydroxyethyl acrylate
Substance Key:	9783
Contaminant ID (CASRN):	818611

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	6	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**300**	**mg/kg**		**Sense Organs and Special Senses (Eye) - ptosis, Behavioral - convulsions or effect on seizure threshold, Gastrointestinal - alteration in gastric secretion**	**GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 24(4),56,1980**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	18	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.21	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.20E-10	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	2-Mercaptobenzothiazole
Substance Key:	6259
Contaminant ID (CASRN):	149304

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	8	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.65**	**mg/kg-d**		**Decreased body weight. Liver toxicity, increased kidney weight with increased brown pigment. Increased incidence of basophilic tubules in the kidney cortex.**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	134	mg/kg-d	1988	Liver - changes in liver weight	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-332,1988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4,550	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	23,624	lbs/yr	4	States	2004	
TRI Release - total	**644,590**	**lbs/yr**	**15**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			
Use	Fungicide; vulcanizer; veterinary medicine (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.41	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3,63E-08	atm-m^3/mol		
Water Solubility	120	mg/L		
% water PBT profiler	23			

Contaminant	2-Methylbutane
Substance Key:	2832
Contaminant ID (CASRN):	78784

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	10	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**357**	**mg/kg-d**		**Nutritional and Gross Metabolic - weight loss or decreased weight gain, Related to Chronic Data - death**	**Lowest Observed Adverse Effect Level; TIHEEC Toxicology and Industrial Health. (Princeton Scientific Pub. Co., POB 2155, Princeton, NJ 08540) V.1- 1985- Volume(issue)/page/year 1(3),67,1985**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	833	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Solvent; chemical intermediate; medication (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	520	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.72	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.4	atm-m^3/mol		
Water Solubility	48	mg/L		
% water PBT profiler	**55**			

Contaminant	2-Methylpyridine
Substance Key:	4741
Contaminant ID (CASRN):	109068

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	3	6	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.0099**	**mg/kg-d**		**Blood - change in clotting factors, Blood - changes in other cell count (unspecified), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 33(12),18,1968**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	674	mg/kg		Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold, Behavioral - excitemen	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 45(12),62,1980
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.0232	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**27,839**	**lbs/yr**	**6**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			
Use	Chemical intermediate; solvent (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	96	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.11	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.96E-06	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	2-Naphthalenamine
Substance Key:	3487
Contaminant ID (CASRN):	91598

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**1.8**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	1		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.0194	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**5**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Research chemical; formerly in dye manufacture (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.28	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.10E-08	atm-m^3/mol		
Water Solubility	6.4	mg/L		
% water PBT profiler	25			

Contaminant	2-Naphthalenol
Substance Key:	5876
Contaminant ID (CASRN):	135193

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	5	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	10	mg/kg-d		Decreased motor activity	No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.437**	**mg/kg-d**	**1965**	**Brain and Coverings - other degenerative changes, Behavioral - alteration of classical conditioning**	**Lowest Observed Adverse Effect Level; oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 30(9),22,1965. The LOAEL was used for potency/severity scoring because it was lower than the NO(A)EL from other studies.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,335	mg/kg	1965	Details of toxic effects not reported other than lethal dose value	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 30(9),22,1965
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.02	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	In dyes; as lubricant; former anthelmintic (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	0.45	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.60E-08	atm-m^3/mol		
Water Solubility	756	mg/L		
% water PBT profiler	**24**			

Contaminant	2-Nitropropane
Substance Key:	2889
Contaminant ID (CASRN):	79469

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	6	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	50	mg/kg-d		Increased anemia, thrombocyte count, and heart weight	Supplemental Data; WHO EHC 130
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**9.5**	**$(mg/kg-d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B		1999		Vol.29, Suppl. 7; Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	117	ug/L			
Health Reference Level (HRL)[2] cancer	0.0037	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	294	lbs/yr	1	States	2004	
TRI Release - total	**25,344**	**lbs/yr**	**6**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			
Use	Former pesticide; industrial solvent additive; chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	24.95	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.93	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000119	atm-m^3/mol		
Water Solubility	17,000	mg/L		
% water PBT profiler	41			

Contaminant	2-Propanone oxime
Substance Key:	5638
Contaminant ID (CASRN):	127060

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		5	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			Clear evidence of carcinogenicity in male/female rats and male/female mice (NTP)
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	**>1M - 10M**	**lbs/yr**	**1998**			
		lbs/yr	2002			
Use	Industrial chemical (EPA/SRS)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.12	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.80E-06	atm-m^3/mol		
Water Solubility	106,000	mg/L		
% water PBT profiler	**44**			

Contaminant	2-Pyrrolidone
Substance Key:	8675
Contaminant ID (CASRN):	616455

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**80.4**	**mg/kg-d**		**Behavioral - food intake (animal), Kidney, Ureter, Bladder - changes in bladder weight, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol)**	**Lowest Observed Adverse Effect Level; oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0521310-3**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	328	mg/kg	1979	Behavioral - coma, Lungs, Thorax, or Respiration - dyspnea	TVLMB8 Trudy Volgogradskogo Gosudarstvennogo Meditsinskogo Instituta. Transactions of the Volgograd State Medical Institute. (Volgogradskii Gosudarstvennyi Meditskinskii Institut, Volgograd, USSR) 1961- Volume(issue)/page/year 31,160,1979
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	187.6	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>10M - 50M	**lbs/yr**	**2002**			

Use	Chemical intermediate; in pharmaceutical preparations (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	17	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.85	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.06E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**40**			

Contaminant	2-tert-Butylhydroquinone
Substance Key:	12479
Contaminant ID (CASRN):	1948330

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	5	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	**0.7**	**mg/kg**	**1998**	**Decreased hemoglobin oand/or hematocrit and RBC counts No evidence for cancer in mice or rats No evidence of cancer in male or female rats or mice**	**Supplemental data; JEFCA and NTP ADI**
Supplemental RfD-like value	0.2	mg/kg-d			Maximum Recommended Daily Dose (MRDD); MRDDs were only used for screening, not for attribute scoring
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	178.6	mg/kg	1997	Blood - changes in spleen, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-459,1997
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4,900	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>1M - 10M	lbs/yr	1998
	>1M - 10M	**lbs/yr**	**2002**

Use	Antioxidants in fats and oils (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**13**			

Contaminant	3,3'-Dichlorobenzidine
Substance Key:	3511
Contaminant ID (CASRN):	91941

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	2	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.008**	**mg/L**			
RAISHE Slope Factor	0.45	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	1.2	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1990		
IARC Carcinogen Classification	2B		1987		Vol. 29, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, RAISHE, OEHHA, IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.08	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data									ug/L	
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**2.01**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	135	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	10K - 500K	lbs/yr	2002			
Use	In dyes; curing agent for polymers and rubber products (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	7,489	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.51	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.11E-11	atm-m^3/mol		
Water Solubility	3.1	mg/L		
% water PBT profiler				

Contaminant	3,3'-Dimethylbenzidine dihydrochloride
Substance Key:	8575
Contaminant ID (CASRN):	612828

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	1	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	200	mg/kg-d	1991	Endocrine - changes in thymus weight, Blood - changes in bone marrow (not otherwise specified), Blood - changes in erythrocyte (RBC) count	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-390,1991
Supplemental LOAEL	**1.8**	**mg/kg-d**	**1991**	**Increased T3, decreased T4 increased THF, cystic degeneration and foci of cellular alteration in the liver, nephropathy, hyperplasia of Zymbals gland preputial and clitoral glands and alveolar epithelium. Clear evidence of cancer in male and female mice.**	**Supplemental Data; NTP; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-390,1991**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4.2	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr				
	10K-500K	**lbs/yr**	**1990**			

Use	In dyes (NTP)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**18**			

Contaminant	3,4-Dichloro-1-butene
Substance Key:	9586
Contaminant ID (CASRN):	760236

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	4	8	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**2**	**mg/kg-d**		**Increased liver weight; increased kidney weight; liver cell enlargement**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	943	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**38**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.6	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0086	atm-m^3/mol		
Water Solubility	420	mg/L		
% water PBT profiler	**61**			

Contaminant	3,6-Dichlorosalicylic acid
Substance Key:	14832
Contaminant ID (CASRN):	3401807

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**3**	**mg/kg-d**	**1978**	**Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - catalases, Biochemical - Enzyme inhibition, induction, or change in bl**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 43(10),95,1978; 26-week rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	660	mg/kg	1978	Brain and Coverings - recordings from specific areas of CNS	mouse study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 43(10),95,1978
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	**>10M - 50M**	**lbs/yr**	**1986**			
		lbs/yr	2002			

Use	Herbicide (ChemIDPlus)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**14**			

Contaminant	3-Chloro-2-methyl-1-propene
Substance Key:	7957
Contaminant ID (CASRN):	563473

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	3	4

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	214	mg/kg-d	1986	Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 13-week rat study; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-300,1986
Supplemental LOAEL	75	mg/kg-d		increased instance of forestomach inflammation; clear evidence of cancer in rats and mice	Supplemental Data; NTP Report 209
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.14**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1995		Vol. 63
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	ug/L			
Health Reference Level (HRL)[2] cancer	0.25	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**6,635**	**lbs/yr**	**3**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>10M - 50M	lbs/yr	2002			
Use	Insecticide/fungicide (ChemIDPlus)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	81	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0087	atm-m^3/mol		
Water Solubility	1,400	mg/L		
% water PBT profiler	63			

Contaminant	3-Methylpyridine
Substance Key:	4735
Contaminant ID (CASRN):	108996

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	4	6	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**100**	**mg/kg-d**	**1985**	**increased latency on evoked potentials, increae latency of pentylenetetrazol-induged seizures.**	**Supplemental Data; NTP cites Dyer, et al., 1985**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	400	mg/kg	1986	Details of toxic effects not reported other than lethal dose value	rat study; 85JCAE "Prehled Prumyslove Toxikologie; Organicke Latky," Marhold, J., Prague, Czechoslovakia, Avicenum, 1986 Volume(issue)/page/year -,841,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	233	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>10M - 50M	**lbs/yr**	**2002**			

Use	Industrial solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	110	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.73E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**45**			

Contaminant	3-Pyridinecarbonitrile
Substance Key:	4116
Contaminant ID (CASRN):	100549

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**5**	**mg/kg-d**		**Liver cell enlargement or alteration, liver and kidney weights were increased.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	1,455	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Insecticide; chemical intermediate; former fumigant (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	37	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.36	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.74E-07	atm-m^3/mol		
Water Solubility	135,000	mg/L		
% water PBT profiler	**48**			

Contaminant	4,4'-Bipyridine
Substance Key:	7828
Contaminant ID (CASRN):	553264

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**172**	**mg/kg**	**1982**	**Sense Organs and Special Senses (Eye) - lacrimation, Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea**	**JTEHD6 Journal of Toxicology and Environmental Health. (Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005) V.1- 1975/76- Volume(issue)/page/year 10,363,1982. Rat study.**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>10M - 50M	**lbs/yr**	**2002**			

Use	Industrial chemical (EPA/SRS)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.28	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.52E-09	atm-m^3/mol		
Water Solubility	4,530	mg/L		
% water PBT profiler	**37**			

Contaminant	4,4'-Diaminodiphenyl ether
Substance Key:	4204
Contaminant ID (CASRN):	101804

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	2	2

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	3.4	mg/kg-d	1986	Cardiac - EKG changes not diagnostic of specified effects, Vascular - BP elevation not characterized in autonomic section	Lowest Observed Adverse Effect Level; 26-wk rat study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 51(6),31,1986
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.14**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1987		Vol. 29, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA, IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7.9	ug/L			
Health Reference Level (HRL)[2] cancer	0.25	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	621	lbs/yr	1	States	2004	
TRI Release - total	**985**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	lbs/yr	2002			
Use	Chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	315	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.06	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-11	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	35			

Contaminant	4,4'-Dichlorodiphenyl sulfone
Substance Key:	2920
Contaminant ID (CASRN):	80079

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.005**	**mg/kg-d**		**Increased incidence or severity of liver lesions;cetrilobular hypertrophy, centrilobilar degeneration and bile dict hyperplasia**	**Reference Dose**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2	mg/kg-d	1982	Brain and Coverings - recordings from specific areas of CNS, Liver - liver function tests impaired	Lowest Observed Adverse Effect Level; 26-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 47(2),84,1982
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			
Use	Chemical intermediate; polymer additive (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	7,600	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.9	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.40E-07	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**10**			

Contaminant	4,4'-Methylenebis(N,N-dimethyl)benzenamine
Substance Key:	4189
Contaminant ID (CASRN):	101611

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.08**	**mg/L**			**IRIS**
RAISHE Slope Factor	0.046	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)	0.046	$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	3		1987		Vol. 27, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE, EPA, OEHHA, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.8	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	**10K - 500K**	**lbs/yr**	**1990**			
		lbs/yr	2002			
Use	Chemical intermediate for dyes (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**14,700**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	4.37	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.21E-07	atm-m^3/mol		
Water Solubility	4.14	mg/L		
% water PBT profiler				

Contaminant	4,4'-Methylenedi(phenyl isocyanate)
Substance Key:	4194
Contaminant ID (CASRN):	101688

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	8	3

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**2,200**	**mg/kg**	**1982**	**Details of toxic effects not reported other than lethal dose value**	**85GMAT "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982 Volume(issue)/page/year -,63,1982. Mouse study.**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D		1998		
IARC Carcinogen Classification	3		1999		Vol., 19, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M - 500M	lbs/yr	1998
	>100M - 500M	**lbs/yr**	**2002**

Use	Constituent of adhesives and coatings (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**376,000**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	5.22	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.96E-07	atm-m^3/mol		
Water Solubility	0.829	mg/L		
% water PBT profiler				

Contaminant	4-Aminobiphenyl
Substance Key:	3566
Contaminant ID (CASRN):	92671

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	1	1

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**21**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	1		1987		Vol. 1, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA, IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.00167	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**1**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Chemical intermediate; research chemical (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	857	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.86	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-07	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	19			

Contaminant	4-Aminodiphenylamine
Substance Key:	4183
Contaminant ID (CASRN):	101542

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**150**	**mg/kg-d**		**Behavioral - food intake (animal), nutritional and gross metabolic weight loss of decreased weight gain, related to chronic data - death**	**Lowest Observed Adverse Effect Level; TOXID9 Toxicologist. (Soc. of Toxicology, Inc., 475 Wolf Ledge Parkway, Akron, OH 44311) V.1- 1981- Volume(issue)/page/year 12,103,1992**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Dye; chemical intermediate for pharmaceuticals (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	3,100	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.70E-10	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**27**			

Contaminant	4-Chloro-1,2-diaminobenzene
Substance Key:	3792
Contaminant ID (CASRN):	95830

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.016**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1987		Vol. 27, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	2.19	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data		lbs/yr							
	>10K-500K	**lbs/yr**	**1986**						
Use	Dye intermediate and constituent (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.28	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.99E-10	atm-m^3/mol		
Water Solubility	6,590	mg/L		
% water PBT profiler	**37**			

Contaminant	4-Chlorobenzotrichloride
Substance Key:	16518
Contaminant ID (CASRN):	5216251

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	6	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**20**	**$(mg/kg\text{-}d)^{-1}$**			**USEPA, 1987**
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2			lung; adenocarcinoma	USEPA, 1987; mouse study
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; CACART; RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.00175	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>10M - 50M**	**lbs/yr**	**1998**			
		lbs/yr	2002			

Use	Industrial chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**1,912**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	4.54	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000193	atm-m^3/mol		
Water Solubility	4.04	mg/L		
% water PBT profiler				

Contaminant	4-Hydroxy-4-methyl-2-pentanone
Substance Key:	5511
Contaminant ID (CASRN):	123422

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**30**	**mg/kg-d**		**Functional and histopatological effects in the kidney**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	40	mg/kg-d		Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis)	Lowest Observed Adverse Effect Level; 30-day rat study; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0557741
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	2,520	mg/kg		Details of toxic effects not reported other than lethal dose value	rat study; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0557732
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M - 500M	lbs/yr	1998
	>100M - 500M	**lbs/yr**	**2002**

Use	Chemical intermediate; solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	21	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.098	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.24E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**46**			

Contaminant	4-Methyl-2-pentanol
Substance Key:	4665
Contaminant ID (CASRN):	108112

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**2,600**	**mg/kg**	**1986**	**Most likely CNS effects based on inhalation data**	**American Conference of Governmental Industrial Hygienists. Documentation of the Threshold Limit Values and Biological Exposure Indices. 5th ed. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 1986., p. 401**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M - 100M	lbs/yr	1998
	>100M - 500M	**lbs/yr**	**2002**

Use	Industrial solvent; in lubricants and lacquers (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	143	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.43	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	16,400	mg/L		
% water PBT profiler	**35**			

Contaminant	4-Methyl-3-thiosemicarbazide
Substance Key:	18177
Contaminant ID (CASRN):	6610293

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**14**	**mg/kg**		**Behavioral - tremor, Gastrointestinal - changes in structure or function of salivary glands, Gastrointestinal - hypermotility, diarrhea**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0571100**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1986**			
		lbs/yr	2002			
Use	Industrial chemical (EPA/SRS)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**40**			

Contaminant	4-tert-Butylcyclohexanone
Substance Key:	3968
Contaminant ID (CASRN):	98533

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	9	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**5,000**	**mg/kg**	**1975**	**Details of toxic effects not reported other than lethal dose value**	**FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 13,729,1975**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	**500M-1B**	**lbs/yr**	**1998**
		lbs/yr	2002

Use	Industrial chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**16**			

Contaminant	4-Vinylcyclohexene
Substance Key:	4103
Contaminant ID (CASRN):	100403

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	500	mg/kg-d		Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB91211250
Supplemental LOAEL	**200**	**mg/kg**		**Inflamatory lesions and epithelial hyperplasia of the forestomach, cytologic alteration of the adrenal cortex - clear evidence of ovarian cancer in female mice and increased incicence of adrenal adenomas - mortality too high to make judgment on male and female**	**Supplemental Data; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB91211250**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1994		Vol. 60; cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	467	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M - 10M	lbs/yr	1998
	>1M - 10M	**lbs/yr**	**2002**

Use	Chemical intermediate; polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	3,300	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.93	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.045	atm-m^3/mol		
Water Solubility	50	mg/L		
% water PBT profiler	**35**			

Contaminant	5-Chloro-o-toluidine
Substance Key:	3789
Contaminant ID (CASRN):	95794

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	1	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**464**	**mg/kg**	**1973**	**Details of toxic effects not reported other than lethal dose value**	**NCILB Progress Report for Contract No. NIH-NCI-E-C-72-3252, Submitted to the National Cancer Institute by Litton Bionetics, Inc. (Bethesda, MD) Volume(issue)/page/year NCI-E-C-72-3252,1973**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		2000		Vol. 77
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**10K - 500K**	**lbs/yr**	**1998**			
		lbs/yr	2002			
Use	Dye intermediate; in dye formulations (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	234	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.58	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**26**			

Contaminant	5-Ethylidene-2-norbornene
Substance Key:	25357
Contaminant ID (CASRN):	16219753

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	6	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**4**	**mg/kg-d**		**Hematological effects**	**Supplemental Data; CTDJPN; male**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	900	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.13	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**58**			

Contaminant	5-Nitro-o-anisidine
Substance Key:	4039
Contaminant ID (CASRN):	99592

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	450	mg/kg-d	1988	Liver - liver function tests impaired, Liver - changes in liver weight, Blood - other changes	Lowest Observed Adverse Effect Level; 30-day rat study; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 32(3),48,1988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.046	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.049**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	3		1987		Vol. 27, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE, OEHHA, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,050	ug/L			
Health Reference Level (HRL)[2] cancer	0.714	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	10K - 500K	lbs/yr	1998
	10K - 500K	**lbs/yr**	**2002**

Use	Dye intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**37.53**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.47E-08	atm-m^3/mol		
Water Solubility	115	mg/L		
% water PBT profiler				

Contaminant	5-Nitro-o-toluidine
Substance Key:	4036
Contaminant ID (CASRN):	99558

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.033**	**$(mg/kg\text{-}d)^{-1}$**	**1990**	**liver**	**Vol. 48; mouse study; USEPA 1987**
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				USEPA 1987
IARC Carcinogen Classification	3		1990		Vol. 48
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	1.06	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**255**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	10K - 500K	lbs/yr	1998
	10K - 500K	lbs/yr	2002

Use	Dye intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodergades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	85.4	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.87	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.94E-08	atm-m^3/mol		
Water Solubility	1,878	mg/L		
% water PBT profiler	26			

Contaminant	Abamectin
Substance Key:	61779
Contaminant ID (CASRN):	71751412

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	7	9	3

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 57.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	**0.002**	**mg/kg-d**	**1997**	**Embryo- and fetotoxicity: increased mortality, reduced weight. Maternal toxicity: reduced body weight gain**	**Acceptable Daily Intake**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1.5	mg/kg	2001	Details of toxic effects not reported other than lethal dose value	Rat study; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1160,2001
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**14,932**	**lbs/yr**	**24**	**States**	**1997**	
TRI Release - surface water	9	lbs/yr	1	States	2004	
TRI Release - total	9.3	lbs/yr	2	States	2004	

Supplemental Water Data						
OPP Estimated Environmental Concentration		Surface water chronic: 0.244 ug/L			Ground water chronic: 0.00371 ug/L	
HRL Ratios (HRL/SWC EEC)		Non-cancer: 57.4			Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide; anthelmintic (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	5,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.70E-07	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Acetaminophen
Substance Key:	4349
Contaminant ID (CASRN):	103902

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NREC SW MAX: 35

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
EMEA ADI	**0.05**	**mg/kg-d**		**Cholestatic effects**	**Acceptable Daily Intake; The European Union European Medicines Agency (EMEA)**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	747	mg/kg-d		Liver - other changes, Kidney, Ureter, Bladder - changes in bladder weight, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-394,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
DSSTOX TD_{50}	495	mg/kg-d			Tumorigenic Dose - 50
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			DSSTOX
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water	**84**		**23.8**		**10**	**0.11**			**ug/L**	**National Reconnaissance**
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Snyder, et al., 2007			0	Not detected	Not detected	Not detected	Not detected		Drinking water monitoring; Snyder, et al., 2007. Removal of EDCs and Pharmaceuticals in Drinking and Reuse Treatment Processes. American Water Works Association.
Focazio, et al., 2008					0.16			ug/L	Focazio, et al., 2008. Sci.Tot. Env., 402(2-3), pp. 201-216.

HRL Ratios (HRL/NREC SW MAX)	Non-cancer: 35	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	BS = Biodegrades slow
K_{OC}, Organic Carbon Partition Coefficient	41	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.46	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.42E-13	atm-m^3/mol		
Water Solubility	14,000	mg/L		
% water PBT profiler	38			

Contaminant	Acetic acid
Substance Key:	2464
Contaminant ID (CASRN):	64197

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1.47**	**mg/kg-d**	**1972**	**Gastrointestinal - changes in structure or function of esophagus, Gastrointestinal - ulceration or bleeding from small intestine, Gastrointestinal - ulceration or bleeding from large intestine**	**Lowest Observed Adverse Effect Level; AIHAAP American Industrial Hygiene Association Journal. (AIHA, 475 Wolf Ledges Pkwy., Akron, OH 44311) V.19- 1958- Volume(issue)/page/year 33,624,1972. Human study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,310	mg/kg	1959	Details of toxic effects not reported other than lethal dose value	rat study; DMDJAP Delaware State Medical Journal. (Wilmington, DE) V.1-32(1), 1929-60. For publisher information, see DSMJAA. Volume(issue)/page/year 31,276,1959
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3.43	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year	Notes
CUSIUR Production Data	>1B	lbs/yr	1998	
	>1B	**lbs/yr**	**2002**	

Use	Pesticide; veterinary medicine; chemical reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	6.5-228	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.71	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**36**			

Contaminant	Acetic anhydride
Substance Key:	4676
Contaminant ID (CASRN):	108247

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	10	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,780**	**mg/kg**	**1951**	**Details of toxic effects not reported other than lethal dose value**	**AMIHBC AMA Archives of Industrial Hygiene and Occupational Medicine. (Chicago, IL) V.2-10, 1950-54. For publisher information, see AEHLAU. Volume(issue)/page/year 4,119,1951; rat study**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	> 1B	lbs/yr	1998
	> 1B	**lbs/yr**	**2002**

Use	Pesticide; chemical reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**4.4 minutes**	**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	120,000	mg/L		
% water PBT profiler	**44**			

Contaminant	Acetone
Substance Key:	2510
Contaminant ID (CASRN):	67641

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	9	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA 90%: 568

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.9**	**mg/kg-d**	**2003**	**Nephrotoxicity**	**Reference Dose; rat study; UF = 1000, MF = 1; Dietz, et., al, 1991; NTP, 1991**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.9	mg/kg-d	2003	Nephropathy	Reference Dose
ATSDR (ITER), MRL	2	mg/kg-d	1994	Hemato.	Minimal Risk Level, UF = 100
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	100	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	3,000	mg/kg-d		Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight, Blood - normocytic anemia	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NIH-91-3122
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1990		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	6,300	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**2,605**	**168**	**6.45**	**0.3**	**1,806**	**2.77**	**11.1**	**52.4**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	653	25	3.83	2	210	11	114	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 568				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			
Use	Solvent; in PPCPs (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1.98	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.24	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.96E-05	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Acetone cyanohydrin
Substance Key:	2688
Contaminant ID (CASRN):	75865

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	4	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.0008**	**mg/kg-d**	**1994**	**increased relative weight; liver**	**Reference Dose; UF = 3,000; Rat study**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	14.8	mg/kg-d	1971	Gastrointestinal - ulceration or bleeding from stomach, Liver - other changes	Lowest Observed Adverse Effect Level; 35-wk rat study; AMPMAR Archives des Maladies Professionnelles de Medecine du Travail et de Securite Sociale. (SPPIF, B.P.22, F-41353 Vineuil, France) V.7- 1946- Volume(issue)/page/year 32,653,1971
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1.90	mg/kg	1994	Details of toxic effects not reported other than lethal dose value	Mouse study; TOVEFN Toksikologicheskii Vestnik. (18-20 Vadkovskii per. Moscow, 101479, Russia) History Unknown Volume(issue)/page/year (1),29,1994
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	5.6	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**106,961**	**lbs/yr**	**4**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	> 1B	lbs/yr	1998
	> 1B	lbs/yr	2002

Use	Chemical intermediate; (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = Biodegrades slow (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.30E-05	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Acetonitrile
Substance Key:	2621
Contaminant ID (CASRN):	75058

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.006**	**mg/kg-d**		**Blood- decreased hematocrit; Liver- increased relative weight; hepatic lesions; erythrocyes- decreased cell count**	**Reference Dose**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	42	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	11,220	lbs/yr	14	States	2004	
TRI Release - total	**12,784,367**	**lbs/yr**	**30**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M - 100M	lbs/yr	1998
	>10M - 50M	lbs/yr	2002

Use	Solvent; in PPCPs; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	4.5	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.45E-05	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Acrylic acid
Substance Key:	2862
Contaminant ID (CASRN):	79107

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.5**	**mg/kg-d**	**1994**	**Reduced pup weight**	**Reference Dose. BASF, 1993. Rat study**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.5	mg/kg-d			BASF, 1993. rat study, uf = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI	0.135	mg/kg-d		liver	Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	250	mg/kg-d	1983	Behavioral - fluid intake, Kidney, Ureter, Bladder - changes in bladder weight, Related to Chronic Data - changes in testicular weight	Lowest Observed Adverse Effect Level; DCTODJ Drug and Chemical Toxicology. (Marcel Dekker, 270 Madison Ave., New York, NY 10016) V.1- 1977/78- Volume(issue)/page/year 6,1,1983; oral study in rat
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 19, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,500	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	19,798	lbs/yr	9	States	2004	
TRI Release - total	**6,817,569**	**lbs/yr**	**30**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Chemical and polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF/BST	BF = Biodegrades fast (BIODEG); BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1.201	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.35	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.69E-07	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Acrylonitrile
Substance Key:	4592
Contaminant ID (CASRN):	107131

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.001	mg/kg-d		decreased sperm counts	Reference Dose
ATSDR (ITER), MRL	0.04	mg/kg-d	1990	Hemato.; decreased red cell counts	Minimal Risk Level; Biodynamics, 1980b. Rat study; UF = 100
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2	mg/kg-d	1984	Endocrine - adrenal cortex hyperplasia, Endocrine - changes in adrenal weight, Blood - other changes	Lowest Observed Adverse Effect Level; JJATDK JAT, Journal of Applied Toxicology. (John Wiley & Sons Ltd., Baffins Lane, Chichester, W. Sussex PO19 1UD, UK) V.1- 1981- Volume(issue)/page/year 4,131,1984; 60-day rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.006**	**mg/L**			
RAISHE Slope Factor	0.54	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)	1	$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	B1		1990		Biodynamics, 1980a,b; Quast et al., 1980a; rat study
IARC Carcinogen Classification	2A		1999		OEHHA lists IARC classification of 2B
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, RAISHE, OEHHA, IARC, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	ug/L			
Health Reference Level (HRL)[2] cancer	0.06	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**2,614**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	21,559	lbs/yr	10	States	2004	
TRI Release - total	7,925,644	lbs/yr	29	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	180	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	lbs/yr	2002			

Use	Pesticide/fumigant; polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	8.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000138	atm-m^3/mol		
Water Solubility	74,500	mg/L		
% water PBT profiler				

Contaminant	Adipic acid
Substance Key:	5549
Contaminant ID (CASRN):	124049

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	10	5

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	4,000	mg/kg-d	1967	gastrointestinal effects: hypermotility, diarrhea and weight low or decreased weight gain	Lowest Observed Adverse Effect Level; FAO Nutrition Meeting Reports 4011 1967
Supplemental LOAEL	**800**	**mg/kg-d**		**Chronic inflamatory alterations of the intestines**	**Supplemental Data; FDA/Informatics. NTIS PB230 305**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,867	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	> 1B	lbs/yr	1998
	> 1B	**lbs/yr**	**2002**

Use	Food additive; in PPCPs; polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	26	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.08	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.70E-12	atm-m^3/mol		
Water Solubility	14,000-30,000	mg/L		
% water PBT profiler	**34**			

Contaminant	Adiponitrile
Substance Key:	4964
Contaminant ID (CASRN):	111693

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOAEL	**30**	**mg/kg-d**	**1986**	**Maternal toxicity**	**Supplemental Data. Journal. Johannsen et al 1986**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	22	mg/kg	1996		Lewis, R.J. Sax's Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 73. Rabbit study.
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	22	mg/kg	1984	Details of toxic effects not reported other than lethal dose value	rabbit study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 49(12),40,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D		1991		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	> 1B	lbs/yr	1998
	> 1B	**lbs/yr**	**2002**

Use	Chemical and polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	16	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.21E-09	atm-m^3/mol		
Water Solubility	80,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Aldrin
Substance Key:	6511
Contaminant ID (CASRN):	309002

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	1	6

3-model Categorical Prediction
L?
HRL Ratio(s)
CAR HRL/NCOD R2 90%: 4.55

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.00003	mg/kg-d	1987	liver lesions, increased liver to body weight ratio	Reference Dose; Fitzhugh et al., 1964; Basis LOAEL 0.025, rat, UF=1000.
EPA HA RfD	0.00003	mg/kg-d	1992		Reference Dose
RAISHE RfD	0.00003	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.00003	mg/kg-d	2000	liver	Minimal Risk Level; Fitzhugh et al., 1964; Basis LOAEL 0.025; rat study; UF = 1,000
JMPR, maximum ADI	0.0001	mg/kg	1994		Acceptable Daily Intake; combined total for aldrin and dieldrin
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.0001	mg/kg-d	2000	liver	Tolerable Daily Intake; Fitzhugh and Nelson, 1963; Fitzhugh et al., 1964; Basis LOAEL 0.025; rat study, dog study; UF = 250
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.05	mg/kg-d	1966	Endocrine - other changes, Blood - other changes	Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 31(4),13,1966; 26-wk rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0002**	**mg/L**	**1992**		
RAISHE Slope Factor	17	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	17	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1992		
IARC Carcinogen Classification	3		1987		Vol. 5, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, RAISHE, OEHHA, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.21	ug/L			
Health Reference Level (HRL)[2] cancer	0.002	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**12,221**	**12**	**0.0982**	**0.1**	**4.4**	**0.84**	**4.4**	**4.4**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	1	States	2004	
TRI Release - total	2,961	lbs/yr	4	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	5,226	32	0.61	0.01	107	99	102	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
PDP	105							ug/L	2002

HRL Ratios (HRL/NCOD R2 90%)	Non-cancer:	Cancer: 4.55	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Former insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	106,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	6.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.40E-05	atm-m^3/mol		
Water Solubility	0.017	mg/L		
% water PBT profiler				

Contaminant	alpha-Chlorohydrin
Substance Key:	3823
Contaminant ID (CASRN):	96242

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	10	mg/kg-d	2000	Reproductive - Paternal Effects - spermatogenesis (incl. genetic material, sperm morphology, motility, and count), Reproductive - Fertility - other measures of fertility	Lowest Observed Adverse Effect Level; rat study. REPTED Reproductive Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.1- 1987- Volume(issue)/page/year 15,11,2000
Supplemental LOAEL	**5**	**mg/kg-d**	**1994**	**Reproductive - Paternal Effects (sperm motility and count)**	**Supplemental Data; Reproductive Toxicology Volume 8, Issue 3, May-June 1994, Pages 237-250**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	26	mg/kg	1982	Behavioral - somnolence (general depressed activity), Nutritional and Gross Metabolic - weight loss or decreased weight gain	rat study; IPCLBZ International Pest Control. (McDonald Pub., 238A High St., Uxbridge, Middx., UK) V.5- 1962- Volume(issue)/page/year 24,20,1982
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	11.7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M - 10M	lbs/yr	1998
	>1M - 10M	**lbs/yr**	**2002**

Use	Industrial solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.10E-08	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**41**			

Contaminant	alpha-Methylbenzenemethanol
Substance Key:	3990
Contaminant ID (CASRN):	98851

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	9	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**375**	**mg/kg-d**	**1990**	**Decreased body weight gain, impaierd renal function, early mortality CancerPositive male rat and female mouse, negative female rat and male mouse**	**Supplemental Data; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-369,1990**
RTECS Lowest Oral Chronic LOAEL	1,071	mg/kg-d	1990	Liver - changes in liver weight, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-369,1990; 13-wk rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,625	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	**> 1B**	**lbs/yr**	**1994**
		lbs/yr	2002

Use	Flavoring agent; in PPCPs; laboratory reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	<5-52	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.90E-07	atm-m^3/mol		
Water Solubility	1,950	mg/L		
% water PBT profiler	**36**			

Contaminant	alpha-Methylstyrene
Substance Key:	3989
Contaminant ID (CASRN):	98839

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.07**	**mg/kg-d**	**1987**	**increased weight, liver**	**Reference Dose; rat study; UF = 1,000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	1,000	mg/kg-d		reproductive/developmental	No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	50	mg/kg-d	1990	Kidney, Ureter, Bladder - proteinuria, Blood - changes in leukocyte (WBC) count, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; VCVGH "Vrednie chemichescie veshestva, galogenproisvodnie uglevodorodov". (Hazardous substances Galogenated hydrocarbons) Bandman A.L. et al., Chimia, 1990. Volume(issue)/page/year -,203,1990; 4-wk rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	4,500	mg/kg	1963	Details of toxic effects not reported other than lethal dose value	mouse study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 28(12),14,1963
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	490	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	**lbs/yr**	**2002**			

Use	Polymer intermediate; UV degradation inhibitor (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**817.2**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	3.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00254	atm-m^3/mol		
Water Solubility	89	mg/L		
% water PBT profiler				

Contaminant	Ametryn
Substance Key:	9881
Contaminant ID (CASRN):	834128

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	6	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.072**	**mg/kg-d**		**Liver toxicity. Degenerative & inflammatory liver effects**	**Reference Dose; Supplemental Data; OPP. Ciba-Geigy, 1961a**
EPA IRIS (ITER) RfD	0.009	mg/kg-d	1987	liver toxicity	Reference Dose; Ciba-Geigy, 1961a. rat study; Basis NOEL 8.6 mg/kg-d; UF = 1,000
EPA HA RfD	0.009	mg/kg-d	1988		Reference Dose
RAISHE RfD	0.009	mg/kg-d	1987	liver	Reference Dose; Ciba-Geigy, 1961a. rat study
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	25	mg/kg-d	2001	Nutritional and Gross Metabolic - weight loss or decreased weight gain; Blood - other changes	Lowest Observed Adverse Effect Level; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1514,2001; 2-yr rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	504	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**445,571**	**lbs/yr**	**5**	**States**	**1997**	
TRI Release - surface water	31	lbs/yr	3	States	2004	
TRI Release - total	409	lbs/yr	5	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	75	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:			Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	445	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.98	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.39E-09	atm-m^3/mol		
Water Solubility	209	mg/L		
% water PBT profiler				

Contaminant	Amitraz
Substance Key:	32124
Contaminant ID (CASRN):	33089611

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	9	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0125**	**mg/kg-d**		**Hypothermia, drowsiness, decreased blood pressure & heart rate**	**Reference Dose**
EPA IRIS (ITER) RfD	0.0025	mg/kg-d	1998	blood sugar increase, hypothermia	Reference Dose; Upjohn Co., 1972a; Basis NOEL = 0.25 mg/kg-d; Dog study; UF = 100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0025	mg/kg-d		increased mean blood sugar concentration	Reference Dose; Upjohn 1973; UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.01	mg/kg-d	1998		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	100	mg/kg	1978	Details of toxic effects not reported other than lethal dose value	Dog study - SPEADM Special Publication of the Entomological Society of America. (4603 Calvert Rd., College Park, MD 20740) Volume(issue)/page/year 78-1,22,1978
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N			CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	87.5	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**137,097**	**lbs/yr**	**17**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Insecticide; veterinary medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	644,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.89E-06	atm-m^3/mol		
Water Solubility	1	mg/L		
% water PBT profiler	7			

Contaminant	Ammonia
Substance Key:	19125
Contaminant ID (CASRN):	7664417

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	1	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/DBP ICR MED: 150

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/L			
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOAEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	6.18	mg/kg-d	1991	Gastrointestinal - other changes	Lowest Observed Adverse Effect Level; DDSCDJ Digestive Diseases and Sciences. (Plenum Pub. Corp., 233 Spring St., New York, NY 10013) V.24- 1979- Volume(issue)/page/year 36,33,1991; 4-wk rat study
Supplemental LOEL	**0.9**	**mg/kg-d**	**2006**	**Taste threshold**	**Lowest Observed Effect Level. EPA: 2006 Edition of the Drinking Water Standards and Health Advisories. EPA 822-R-06-013. Note: Taste threshold of 30 mg/L converted to a dose using 2 L/d drinking water intake and 70 kg body weight.**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1992		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	30,000	ug/L			HRL set at taste threshold of 30 mg/L
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	Mean value of Detects	Units for Mag data	Notes
DBP ICR	**68**	**58**	**85.29**		**1,100**	**200**	**262**	**ug/L**	

Ambient Water Occurrence Data										
# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**		
NAWQA ambient water	8,185	5,907	72.2	2	34,000	43	284	2,400	ug/L	Measured as N
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	6,284,889	lbs/yr	50	States	2004	
TRI Release - total	172,424,459	lbs/yr	54	States	2004	

Supplemental Water Data	**# PWSs/Sites/Samples**	**# with Detects**	**% PWSs/Sites/Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
CAL DHS	535	171	32	10	15,000	231	1,291	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/DBP ICR MED)	Non-cancer: 150	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>500M - 1B	lbs/yr	2002			

Use	Chemical intermediate; defoliant; antifungal agent for produce (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	14.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.45E-06	atm-m^3/mol		
Water Solubility	3,740	mg/L		
% water PBT profiler				

Contaminant	Ammonium carbamate
Substance Key:	10601
Contaminant ID (CASRN):	1111780

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**681**	**mg/kg**		**Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea, Skin and Appendages - hair**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0535595; rat study**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	> 1B	lbs/yr	1998						
	> 1B	**lbs/yr**	**2002**						
Use	Chemical intermediate; in fertilizers (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-3.67	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	very soluble	mg/L		
% water PBT profiler	**39**			

Contaminant	Ammonium thiosulfate
Substance Key:	19349
Contaminant ID (CASRN):	7783188

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,098**	**mg/kg**	**1982**	**Details of toxic effects not reported other than lethal dose value**	**GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 26(6),54,1982. Guinea pig study**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50 - 100M	lbs/yr	1998			
	>50 - 100M	**lbs/yr**	**2002**			

Use	Fungicide; defoliant; in PPCPs (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	very soluble	mg/L		
% water PBT profiler				

Contaminant	Aniline hydrochloride
Substance Key:	6119
Contaminant ID (CASRN):	142041

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1] NOTE: SK 6119 is the salt of aniline (SK 2438)

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**20**	**mg/kg-d**	**1993**	**Endocrine - changes in spleen weight, Blood - methemoglobinemia-carboxyhemoglobin, Blood - changes in erythrocyte (RBC) count**	**Lowest Observed Adverse Effect Level; AECTCV Archives of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 070944) V.1- 1973- Volume(issue)/page/year 24,368,1993. 90-day rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	46.7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**10K - 500K**	**lbs/yr**	**1990**			
		lbs/yr	2002			
Use	Polymer and chemical intermediate; in PPCPs, in inks (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	44-489	L/kg		Environmental fate parameters are for the free base, not the hydrochloride salt.
log K_{OW}, Octanol Water Partition Coeff.	0.9	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.02E-06	atm-m^3/mol		
Water Solubility	36,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Anisole
Substance Key:	4127
Contaminant ID (CASRN):	100663

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	3	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.65**	**mg/kg-d**	**1994**	**Endocrine - other changes**	**Lowest Observed Adverse Effect Level; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,290,1994. 26-wk rabbit study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	2,800	mg/kg	1946	Behavioral - tremor, Behavioral - convulsions or effect on seizure threshold, Behavioral - excitement	mouse study; JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1- 1909/10- Volume(issue)/page/year 88,400,1946
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.517	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year					
CUSIUR Production Data	10K - 500K	lbs/yr	1998					
	>500K - 1M	**lbs/yr**	**2002**					

Use	Flavoring agent; in PPCPs; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	35	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.11	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00435	atm-m^3/mol		
Water Solubility	1,520	mg/L		
% water PBT profiler	**31**			

Contaminant	Aspirin
Substance Key:	2149
Contaminant ID (CASRN):	50782

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
9	8	1	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.0021**	**mg/kg-d**	**2002**	**Lungs, Thorax, or Respiration - tumors**	**Lowest Observed Adverse Effect Level; BJCAAI British Journal of Cancer. (Macmillan Press Ltd., Houndmills, Basingstoke, Hants. RG21 2XS, UK) V.1- 1947- Volume(issue)/page/year 87,49,2002. 24-wk female human study**
Supplemental LOAEL	66.7	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	200	mg/kg	1969	Details of toxic effects not reported other than lethal dose value	rat study; 34ZIAG "Toxicology of Drugs and Chemicals," Deichmann, W.B., New York, Academic Press, Inc., 1969 Volume(issue)/page/year -,67,1969
Cancer Data - no quantitative risk estimate for the cancer effect was identified					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	CACART, UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.005	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	**10K - 500K**	**lbs/yr**	**1998**			
		lbs/yr	2002			
Use	Medication (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**5.4-6.3 days**	**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	42-106	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.19	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.30E-09	atm-m^3/mol		
Water Solubility	4,600	mg/L		
% water PBT profiler	**33**			

Contaminant	Auramine
Substance Key:	7200
Contaminant ID (CASRN):	492808

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.168**	**mg/kg-d**	**1974**	**Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - catalases**	**TLSMA6 Trudy Leningradskogo Sanitarno-Gigienicheskogo Meditsinskogo Instituta. (Leningrad, Russia) V.1-145, 1949-82. Discontinued. Volume(issue)/page/year 105,45,1974. 17-wk rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.88	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1987		Vol. 1, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA, CACART, IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.392	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	In dye manufacture; medication; fungicide; antiseptic (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	65-74 days	length of time	DST	Degrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	2,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.05E-08	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Azinphos-methyl
Substance Key:	3200
Contaminant ID (CASRN):	86500

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	8	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 68.9

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00149**	**mg/kg**		**RBC ChE inhibition, increased incidence of diarrhea**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.005	mg/kg-d	1991		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.91	mg/kg-d	1997	Brain and Coverings - other degenerative changes, Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; FAATDF Fundamental and Applied Toxicology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1-40, 1981-97. For publisher information, see TOSCF2 Volume(issue)/page/year 35,101,1997; 13-wk rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	10.4	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			
CADW MAC	0.2	mg/L			Canadian Drinking Water Maximum Allowable Concentration

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**7,103**	**145**	**2.04**	**0.002**	**3.37**	**0.027**	**0.151**	**0.932**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	National Aggregate
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	2,091,014	lbs/yr	42	States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# of detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95th %ile value of Detects	Units for Mag data	Notes
PDP	283			0.012	0.021			ug/L	Pesticide Data Program (USDA); 2001
PDP	669			0.012	0.253			ug/L	Pesticide Data Program (USDA); 2002
PPMP		8	2.5		0.144			ug/L	Pesticide Pilot Montoring Program (USGS/EPA) raw water data
PPMP		5	2.2		0.114			ug/L	Pesticide Pilot Montoring Program (USGS/EPA) finished water data
CAL DHS	12	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 68.9	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	27.9 days	length of time	DS	DS = Degrades slow (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	487-4,644	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.75	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.40E-08	atm-m^3/mol		
Water Solubility	20.9	mg/L		
% water PBT profiler				

Contaminant	Bentazon
Substance Key:	28242
Contaminant ID (CASRN):	25057890

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	9	4

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 276

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.03**	**mg/kg-d**	**1998**	**Blood loss into the gastrointestinal tract; Coagulation defect in male & female dogs. Circulatory system.**	**Reference Dose; Allen et al., 1989. Dog study; UF = 100, Basis NOAEL 3.2 mg/kg-d**
EPA HA RfD	0.03	mg/kg-d	1999		Reference Dose
RAISHE RfD	0.03	mg/kg-d	1989	blood loss in gastrointestinall tract; coagulation defect	Reference Dose; UF = 100; dog study
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.1	mg/kg-d	1998		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	E		1998		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			
WHO DWQ	300	ug/L			World Health Organization Drinking Water Guide

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**4,540**	**197**	**4.339**	**0.002**	**11.5**	**0.1**	**0.76**	**4.79**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	7,749,130	lbs/yr	45	States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# of detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95th %ile value of Detects	Units for Mag data	Notes
PDP	100	1	1	0.0188	0.0188			ug/L	Pesticide Data Program (USDA); 2002
PDP	186	14	7.5	0.002	0.018			ug/L	Pesticide Data Program (USDA); 2002
PPMP		80	25.6		0.344		0.021	ug/L	Pesticide Pilot Montoring Program (USGS/EPA) raw water
PPMP		21	9.3		0.019		0.019	ug/L	Pesticide Pilot Montoring Program (USGS/EPA) finished water
	# PWSs/Sites/Samples	**# of detects**	**% PWSs/Sites/Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90th %ile value of Detects**	**Units for Mag data**	
CAL DHS	5,583	2	0.04	0.23	6.2	3.11	5.58	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 276				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Former herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	6.7-50 days	length of time	BS	BS = Biodegrades slow (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	37.5	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.18E-09	atm-m^3/mol		
Water Solubility	500	mg/L		
% water PBT profiler				

Contaminant	Benzaldehyde
Substance Key:	4114
Contaminant ID (CASRN):	100527

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	6	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**	**1988**	**Forestomach hyperplasia & lesions, kidney toxicity (renal tubular necrosis). GI tract, Kidney**	**Reference Dose; Kluwe et al., 1983; rat study; UF = 1,000; Basis NOEL 200 mg/kg-d**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.1	mg/kg-d		forestomach, kidney; lesions, toxicity	Reference Dose; rat study; Kluwe, 1983; UF = 1,000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	17.1	mg/kg-d	1994	Lungs, Thorax, or Respiration - other changes, Liver - multiple effects	Lowest Observed Adverse Effect Level; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,396,1994; 5-wk rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Former pesticide; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**32.7**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.67E-05	atm-m^3/mol		
Water Solubility	6,570	mg/L		
% water PBT profiler				

Contaminant	Benzidine
Substance Key:	3586
Contaminant ID (CASRN):	92875

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
9	8	3	1

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.003	mg/kg-d	1988	brain, liver	Reference Dose; Littlefield et al., 1983; mouse study
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.003	mg/kg-d		brain, liver; cell vacuolizations, call alterations	Reference Dose; Littlefield et al., 1983; mouse study
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	2.7	mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.00002**	**mg/L**			**IRIS**
RAISHE Slope Factor	230	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	500	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	A				
IARC Carcinogen Classification	1		1987		Vol. 29, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAIS; OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	ug/L			
Health Reference Level (HRL)[2] cancer	0.0002	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	66.61	lbs/yr	1	States	2004	
TRI Release - total	**82.92**	**lbs/yr**	**3**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Dye manufacture; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	2,740	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.05E-11	atm-m^3/mol		
Water Solubility	322	mg/L		
% water PBT profiler				

Contaminant	Benzofuran
Substance Key:	6383
Contaminant ID (CASRN):	271896

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	1	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level; 13-wk rat study
Supplemental LOAEL	**30**	**mg/kg-d**	**1989**	**Nephropathy (males) chronic inflamation, ulcers and epitheliam hyperplasia of the stomach Clear evicence of cancer in male and female mice, some evidence in female rats, no evidence in male rats**	**Supplemental Data; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-370,1989**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1995		Vol. 63
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
	10K - 500K	**lbs/yr**	**2002**

Use	In resin manufacture (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	680	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.67	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00053	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**24**			

Contaminant	Benzoic acid
Substance Key:	2484
Contaminant ID (CASRN):	65850

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
1	1	8	7

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**4**	**mg/kg-d**	**1988**	**No adverse effects observed. Decreased Potency Score by one integer**	**Reference Dose; FDA, 1973; human study; Basis NOAEL 34 mg/kg-d; UF = 1**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	4	mg/kg-d			Reference Dose; FDA, 1973; human study
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D		1989		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28,000	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M - 500M	lbs/yr	1998
	>100M - 500M	**lbs/yr**	**2002**

Use	Cancelled pesticide; food preservative; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**0.2-3.6 days**	**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**14.49**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.87	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.82E-08	atm-m^3/mol		
Water Solubility	3,400	mg/L		
% water PBT profiler				

Contaminant	Benzotriazole
Substance Key:	3739
Contaminant ID (CASRN):	95147

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.599**	**mg/kg-d**	**1981**	**Endocrine - other changes, Blood - normocytic anemia, Blood - leukopenia**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 46(11),70,1981; 26-wk rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.4	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M - 10M	lbs/yr	1998
	>1M - 10M	**lbs/yr**	**2002**

Use	Photographic chemical; chemical intermediate; plastics stabilizer; corrosion inhibitor (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	145	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.44	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.17E-07	atm-m^3/mol		
Water Solubility	19,800	mg/L		
% water PBT profiler	**34**			

Contaminant	Benzotrichloride
Substance Key:	3933
Contaminant ID (CASRN):	98077

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	4	2

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.03	mg/kg-d	1994	Liver - other changes, Liver - changes in liver weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - hepatic microsomal mixed oxidase (dealkylation, hydroxylation, etc.)	Lowest Observed Adverse Effect Level; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,43,1994; 28-day rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0003**	**mg/L**			**IRIS**
RAISHE Slope Factor	13	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1990	lung	
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.07	ug/L			
Health Reference Level (HRL)[2] cancer	0.003	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**745**	**lbs/yr**	**4**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	lbs/yr	2002

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,180	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.9	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000259	atm-m^3/mol		
Water Solubility	21.7	mg/L		
% water PBT profiler	8			

Contaminant	Benzyl alcohol
Substance Key:	4113
Contaminant ID (CASRN):	100516

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	6	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.3**	**mg/kg-d**		**Epithelial hyperplasia, forestomach**	**Reference Dose; NTP, 1988. rat study; UF = 1,000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	143	mg/kg-d	1989	Brain and Coverings - other degenerative changes, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-343,1989; 13-wk rat study
Supplemental LOAEL	5	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,100	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Chemical intermediate; solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**15.7**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.1	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.38E-07	atm-m^3/mol		
Water Solubility	42,900	mg/L		
% water PBT profiler				

Contaminant	Bis(2-chloro-1-methylethyl) ether
Substance Key:	4702
Contaminant ID (CASRN):	108601

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	2	2

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	12.9	mg/kg-d	1985	Blood - changes in leukocyte (WBC) count, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other Enzymes	Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 50(5),69,1985; 26-wk rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.07**	**$(mg/kg\text{-}d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification	3		1999		Vol. 41, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	30.1	ug/L			
Health Reference Level (HRL)[2] cancer	0.5	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**883**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Chemical intermediate; solvent; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	39.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000113	atm-m^3/mol		
Water Solubility	1,700	mg/L		
% water PBT profiler				

Contaminant	Bis(2-chloroethyl) ether
Substance Key:	4939
Contaminant ID (CASRN):	111444

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	4	2

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	26	mg/kg-d	1994	Brain and Coverings - other degenerative changes, Liver - multiple effects, Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,283,1994; 45 day oral study in rat
Supplemental LOAEL	25	mg/kg-d	1981	Decreased body weight	ATSDR; Weisburger, et al., 1981. Journal of the National Cancer Institute, 67: 75-88.
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.003**	**mg/L**			**IRIS**
ATSDR Lifetime Cancer Risk, 10^{-4}	0.3	mg/L			ATSDR
RAISHE Slope Factor	1.1	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	2.5	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1988		
IARC Carcinogen Classification	3		1999		Vol. 9, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAISHE; OEHHA; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	60.67	ug/L			
Health Reference Level (HRL)[2] cancer	0.03	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	2	lbs/yr	1	States	2004	
TRI Release - total	**478**	**lbs/yr**	**4**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS	2,348	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			
Use	Former pesticide; chemical intermediate; solvent; gasoline additive (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA/BS/BST	BFA = Biodegrades fast with acclimation; BS = Biodegrades slow; BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	14.95	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.29	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.70E-05	atm-m^3/mol		
Water Solubility	17,200	mg/L		
% water PBT profiler				

Contaminant	Bis(2-ethylhexyl) sodium sulfosuccinate
Substance Key:	8032
Contaminant ID (CASRN):	577117

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	6	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.5**	**mg/kg-d**	**1943**	**Behavioral - food intake (animal), Gastrointestinal - hypermotility, diarrhea, Related to Chronic Data - death**	**Lowest Observed Adverse Effect Level; JIHTAB Journal of Industrial Hygiene and Toxicology. (Cambridge, MA) V.18-31, 1936-49. For publisher information, see AEHLAU. Volume(issue)/page/year 25,175,1943; 24 wk rabbit study**
Supplemental LOAEL	5	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,900	mg/kg	1962	Details of toxic effects not reported other than lethal dose value	Rat study; JSCCA5 Journal of the Society of Cosmetic Chemists. (Soc. of Cosmetic Chemists, 1995 Broadway, Suite 1701, New York, NY 10023) V.1- 1947- Volume(issue)/page/year 13,469,1962
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.17	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Food additive; in PPCPs; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	9.37-1,041	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.00E-12	atm-m^3/mol		
Water Solubility	71,000	mg/L		
% water PBT profiler	**22**			

Contaminant	Bis(chloromethyl) ether
Substance Key:	7727
Contaminant ID (CASRN):	542881

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
9	8	1	1

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.000016**	**mg/L**			**IRIS**
RAISHE Slope Factor	220	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	46	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	A		1991	lung	
IARC Carcinogen Classification	1		1987		Vol. 4, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAISHE; OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer	0.00016	ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
		lbs/yr	2002			

Use	Laboratory reagent; in polymer manufacture (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	4.395	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.58	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000206	atm-m^3/mol		
Water Solubility	22,000	mg/L		
% water PBT profiler	48			

Contaminant:	Bisphenol A (4,4'-Isopropylidenediphenol)
Substance Key:	2918
Contaminant ID (CASRN):	80057

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NREC NA SW MED: 1,750

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.05**	**mg/kg-d**	**1988**	**Reduced body weight**	**Reference Dose; Basis = LOAEL 50 mg/kg-d; UF = 1,000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.05	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.5	mg/kg-d			Lowest Observed Adverse Effect Level; 26-week oral study in rat
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N			UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water	85	35	41.2			0.14			ug/L	National Reconnaissance
NREC ambient ground water	**# Samples**	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	ug/L **Units for Mag data**	National Reconnaissance
NREC ambient surface water			**21.07**			**0.2**			**ug/L**	**National Aggregate**
NREC ambient ground water			10.78			0.2			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	3,538	lbs/yr	8	States	2004	
TRI Release - total	1,504,711	lbs/yr	27	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Maximum value of Detects	Units for Mag data	Notes
Kolpin, et al., 2002			41.2	12	ug/L	Surface water monitoring; Kolpin, et al., 2002. Env. Sci. & Technol., 36(6), pp. 1202-1211.
Stackelberg, et al., 2007			17	0.22	ug/L	New Jersey Finished Drinking Water; Stackelberg, et al., 2007. Sci. Tot. Environ., 377(2-3), pp. 255-272.
Stackelberg, et al., 2007			67	0.36	ug/L	New Jersey Surface Water; Stackelberg, et al., 2007. Sci. Tot. Environ., 377(2-3), pp. 255-272.
Focazio, et al., 2008	73	7	9.6	1.9	ug/L	NREC II Raw Drinking Water; Focazio, et al., 2008. Sci.Tot. Env., 402(2-3), pp. 201-216.

HRL Ratios (HRL/NREC NA SW MED)	Non-cancer: 1,750	Cancer:	

Production	Amount Range	Units	Year	
CUSIUR Production Data	>1B	lbs/yr	1998	
	>1B	lbs/yr	2002	
Use	Production of polycarbonate and epoxy resins. Formely used as fungicide. (HSDB)			

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		days	BFA-BST	BFA = Biodegrades fast with acclimation; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	75,200	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.2E-12	atm-m^3/mol		
Water Solubility	120	mg/L		
% water PBT profiler				

Contaminant:	BMX-1 (3-Chloro-4-(bromochloromethyl)-5-hydroxy-2(5H)-furanone)
Substance Key:	78954
Contaminant ID (CASRN):	132059519

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	1

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
DSSTOX Carcinogen Classification	HM				DSSTOX; HM = High to medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			DSSTOX
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., 2006			**44**		**0.17**	**0.01**		**ug/L**	**Finished drinking water monitoring; Krasner, *et a.l* , 2006. *Env. Sci. Technol.* , 40(23), pp 7175-7185 (and related documentation).**
HRL Ratios (No HRL)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Disinfection By-Product					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		days		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	BMX-2 (3-Chloro-4-(dibromomethyl)-5-hydroxy-2(5H)-furanone)
Substance Key:	74966
Contaminant ID (CASRN):	132059520

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	1

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
DSSTOX Carcinogen Classification	HM				DSSTOX; HM = High to medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			DSSTOX
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., 2006			**33**		**0.03**	**ND**		**ug/L**	**Finished drinking water monitoring; Krasner, et al., 2006. Env. Sci. Technol., 40(23), pp 7175-7185 (and related documentation).**

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		days		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	BMX-3 (3-Bromo-4-(dibromomethyl)-5-hydroxy-2(5H)-furanone)
Substance Key:	78951
Contaminant ID (CASRN):	132059531

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	1

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
DSSTOX Carcinogen Classification	HM				DSSTOX; HM = High to medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			DSSTOX
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., 2006			**11**		**0.4**	**ND**		**ug/L**	**Finished drinking water monitoring; Krasner, et al., 2006. Env. Sci. Technol., 40(23), pp 7175-7185 (and related documentation).**

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		days		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Boron
Substance Key:	18864
Contaminant ID (CASRN):	7440428

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/NIRS 90%: 2.95

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.2**	**mg/kg-d**		**Decreased fetal weight (developmental)**	**Reference Dose; Price et al., 1996a; Heindel et al., 1992**
EPA HA RfD	0.09	mg/kg-d			Reference Dose
RAISHE RfD	0.09	mg/kg-d		Atrophy and spermatigenetic arrest	Reference Dose; Basis = NOAEL/LEL, MF = 1, UF = 100, dog, testicle (Weir & Fisher, 1972)
ATSDR (ITER), MRL	0.01	mg/kg-d	1992		Minimal Risk Level - Int
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	31	mg/kg-d	1970	Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - dehydrogenases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other transferases	Lowest Observed Adverse Effect Level; oral study in rabbit; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 35(11),11,1970
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	3	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			
WHODWQ	0.5	mg/L			World Health Organization Drinking Water Guide
CADW MAC	5	mg/L	1992		Canadian Drinking Water Maximum Allowable Concentration

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**810**	**81.9**	**5**	**3,950**	**46.8**	**475**	**2,585**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	9,360	4,841	51.7	0.01	800,800	180	730	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 2.95	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Former pesticide; oxygen scavenger; catalyst; in composite structural materials (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	14.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.23	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0245	atm-m^3/mol		
Water Solubility	43,700	mg/L		
% water PBT profiler				

Contaminant	Bromacil
Substance Key:	6526
Contaminant ID (CASRN):	314409

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 206

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.1**	**mg/kg-d**		**Decreased body weight gain**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	0.1	mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	62.5	mg/kg-d	1970	Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 35(11),11,1970
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	5	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**4,555**	**108**	**2.37**	**0.001**	**57**	**0.245**	**3.4**	**25.9**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water			15.2			0.675			ug/L	National Aggregate
NREC ambient ground water			0.61			0.57			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	614,219	lbs/yr	4	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP	100	0	0					ug/L	Pesticide Data Program (USDA); 2001
PDP	197	0	0					ug/L	Pesticide Data Program (USDA); 2002
PPMP		2	0.9		0.481			ug/L	Pesticide Pilot Montoring Program (USGS/EPA) finished water data
PPMP		49	15.7		0.481		0.081	ug/L	Pesticide Pilot Montoring Program (USGS/EPA) ambient water data

	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,392	3	0.04	0.93	4	1.5	3.18	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 206			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	64-275 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	2.3-289	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.11	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.29E-10	atm-m^3/mol		
Water Solubility	815	mg/L		
% water PBT profiler				

Contaminant	Bromine
Substance Key:	19194
Contaminant ID (CASRN):	7726956

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	8	8

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**440**	**mg/kg**	**1974**	**Details of toxic effects not reported other than lethal dose value**	**GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 39(4),86,1974**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**381,257**	**lbs/yr**	**15**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	In water disinfection; flame retardant; chemical intermediate; in dyes; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	33,600	mg/L		
% water PBT profiler				

Contaminant	Bromobenzene
Substance Key:	4724
Contaminant ID (CASRN):	108861

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	3	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 21.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.02**	**mg/kg-d**		**Liver lesions**	**Reference Dose**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**16,450**	**32**	**0.195**	**0.04**	**40**	**1**	**6.55**	**40**	**ug/L**	
NCOD Round 2 finished water	24,125	31	0.128	0.05	4.69	0.5	3	4.69	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	3	0.07	0.009	0.4	0.012	0.4	0.4	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,878	3	0.03	0.5	83	0.74	66.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 21.4				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
	>500K-1M	lbs/yr	2002			

Use	In organic synthesis; as solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	268	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.99	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00269	atm-m^3/mol		
Water Solubility	446	mg/L		
% water PBT profiler				

Contaminant:	Bromochloroacetonitrile (BCAN)
Substance Key:	66739
Contaminant ID (CASRN):	83463621

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		
DSSTOX Carcinogen Classification	M				DSSTOX; M = Medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			DSSTOX
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR finished water			**62.5**	**1.63**	**13.4**	**1.29**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# Samples	# with Detects	% Samples w/ Detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation. Note: may hydrolyze
K_{OC}, Organic Carbon Partition Coefficient	13	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.20E-06	atm-m^3/mol		
Water Solubility	18,700	mg/L		
% water PBT profiler	48			

Contaminant	Bromoethane
Substance Key:	2612
Contaminant ID (CASRN):	74964

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	3	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
WHO LD50	**1,350**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**WHO CICAD 42 2002, LD50 1350 mg/kg/day**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>500K-1M	**lbs/yr**	**2002**			

Use	Chemical intermediate; solvent; refrigerant; fumigant; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**40 days**	**length of time**	**DSA**	**DSA = Degrades slow with acclimation**
K_{OC}, Organic Carbon Partition Coefficient	179	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.61	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00741	atm-m^3/mol		
Water Solubility	9,000	mg/L		
% water PBT profiler	**43**			

Contaminant	Butanenitrile
Substance Key:	4791
Contaminant ID (CASRN):	109740

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	9	3	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**28**	**mg/kg**	**1996**	**Details of toxic effects not reported other than lethal dose value**	**Lewis, R.J. Sax's Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 609**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>500K-1M	**lbs/yr**	**2002**			

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	46	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.53	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.23E-05	atm-m^3/mol		
Water Solubility	33,000	mg/L		
% water PBT profiler	**43**			

Contaminant	Butyl benzyl phthalate
Substance Key:	3168
Contaminant ID (CASRN):	85687

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	7	3

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/CAL DHS 90%: 23.7

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.2**	**mg/kg-d**	**1989**	**Significantly increased liver-to-body weight & liver-to-brain weight ratios**	**Reference Dose; NTP, 1985; Basis NOAEL 159 mg/kg/day, rat, UF=1000, pancreas (NTP, 1985)**
EPA HA RfD	0.2	mg/kg-d			Reference Dose
RAISHE RfD	0.2	mg/kg-d		Significantly increased liver-to-body weight & liver-to-brain weight ratios	Reference Dose; NTP, 1985; Basis NOAEL/LEL, rat, liver, brain, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	1.3	mg/kg-d	1998		Tolerable Daily Intake; Basis = BMD 132 mg/kd/day, UF = 100, rat (Hammond et al 1987)
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	100	mg/kg-d	2000	Gastrointestinal - changes in structure or function of salivary glands, Kidney, Ureter, Bladder - changes in kidney weight; endocrine - other changes	Lowest Observed Adverse Effect Level; oral study in rat; REPTED Reproductive Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.1- 1987- Volume(issue)/page/year 14,513,2000
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1988		
IARC Carcinogen Classification	3				Vol. 73, 1999
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	7	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	851	24	2.82	0.004	124	0.2	59	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 23.7				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	100M-500M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Chemical intermediate; plasticizer (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**9,359**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	4.73	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.26E-06	atm-m^3/mol		
Water Solubility	2.69	mg/L		
% water PBT profiler				

Contaminant	Butyric acid
Substance Key:	4649
Contaminant ID (CASRN):	107926

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	8	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	8,790	mg/kg			Budavari, S. (ed.). 1989. The Merck Index - Encyclopedia of Chemicals, Drugs and Biologicals. Rahway, NJ: Merck and Co., Inc., p. 243.
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**2,000**	**mg/kg**	**1982**	**Details of toxic effects not reported other than lethal dose value**	**85GMAT "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982 Volume(issue)/page/year -,30,1982**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	100M-500M	lbs/yr	1998
	100M-500M	**lbs/yr**	**2002**

Use	Chemical intermediate; food additive; varnish manufacture (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	64	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.79	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.35E-07	atm-m^3/mol		
Water Solubility	60,000	mg/L		
% water PBT profiler	**37**			

Contaminant	Butyric anhydride
Substance Key:	4521
Contaminant ID (CASRN):	106310

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**8,790**	**mg/kg**	**1986**	**Details of toxic effects not reported other than lethal dose value**	**85JCAE "Prehled Prumyslove Toxikologie; Organicke Latky," Marhold, J., Prague, Czechoslovakia, Avicenum, 1986 Volume(issue)/page/year -,321,1986; Rat study**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.39	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000111	atm-m^3/mol		
Water Solubility	4,560	mg/L		
% water PBT profiler	**39**			

Contaminant	C.I. Acid Red 114, disodium salt
Substance Key:	18026
Contaminant ID (CASRN):	6459945

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	10

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**8**	**mg/kg-d**		**Decreased body weight gain shortened lifespan at higher doses. Clear evidence of carcinogenicity in male and female rats (mice not tested)**	**Supplemental Data; NTP Report 405**
RTECS Lowest Oral Chronic LOAEL	120	mg/kg-d	1991	Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-405,1991
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				Vol. 57, 1993
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	56	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	**10K-500K**	**lbs/yr**	**1998**			
		lbs/yr	2002			

Use	Textile dye (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**180**	**length of time**	**BST**	**BST = Biodegrades slow/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	7.86	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.05E-31	atm-m^3/mol		
Water Solubility	2.50E-06	mg/L		
% water PBT profiler	**54**			

Contaminant	C.I. Direct Blue 15
Substance Key:	13296
Contaminant ID (CASRN):	2429745

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	3	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**45**	**mg/kg-d**		**22 month study: decreased survival**	**Supplemental Data; NTP; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-397,1992**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	105	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>500K-1M	lbs/yr	1998
	>500K-1M	**lbs/yr**	**2002**

Use	Dye; biological stain (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**136,000,000**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.71	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.56E-44	atm-m^3/mol		
Water Solubility	0.0059	mg/L		
% water PBT profiler				

Contaminant	C.I. Direct Blue 218
Substance Key:	30455
Contaminant ID (CASRN):	28407376

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	2	3

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**40**	**mg/kg-d**	**1994**	**Squamous and basal hyperplasia of the forestomach - clear evidence of cancer in male and female mice, some evidence in male rats and no evidence in female rats**	**Supplemental Data; NTP; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-430,1994**
RTECS Lowest Oral Chronic LOAEL	500	mg/kg-d	1994	Liver - other changes, Kidney, Ureter, Bladder - changes in bladder weight, Blood - pigmented or nucleated red blood cells	Lowest Observed Adverse Effect Level; oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-430,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; clear evidence of cancer in male and female mice, some evidence in male rats and no evidence in female rats (NTP)
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	280	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**2,609**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer: 140	Cancer:	Notes

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Textile dye (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180	length of time	BST	BST = Biodegrades slow/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	54			

Contaminant	C.I. Disperse Yellow 3
Substance Key:	13973
Contaminant ID (CASRN):	2832408

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**400**	**mg/kg-d**	**1982**	**Decreased weight gain throughout the study; a dose related increase in renal pigmentation was observed in the females- Cancer was positive for male rats and female mice and negative for female rats and male mice**	**Supplemental Data; NTP; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year NTP-TR-222,1982**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				Vol. 48, 1990
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	933	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2002	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2002**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	10K-500K	lbs/yr	1998
	10K-500K	lbs/yr	2002

Use	Textile dye (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60	length of time	BST	BST = Biodegrades slow/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.98	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-11	atm-m^3/mol		
Water Solubility	1.18	mg/L		
% water PBT profiler	9			

Contaminant	C.I. Pigment Red 53, barium salt (2:1)
Substance Key:	16485
Contaminant ID (CASRN):	5160021

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	5	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**25**	**mg/kg-d**		**Haematological effects; spleen, kidney, and liver effects- unspecified.**	**Supplemental Data; SIDS**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.005	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				Vol. 57, 1993
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	58.3	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>1M-10M	**lbs/yr**	**2002**

Use	Chemical intermediate; in paints and inks (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	C.I. Solvent Yellow 14
Substance Key:	9896
Contaminant ID (CASRN):	842079

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	1	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**20**	**mg/kg-d**		**Cardiac valve fibrosis. Nephropathy, Atrophy of pancreatic acinus**	**Supplemental Data; NTP; Study Report TR-226**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				Vol. 8, Suppl. 7, 1987
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	46.7	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**10K-500K**	**lbs/yr**	**1990**			
		lbs/yr				
Use	Dye for organic solutions (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38**	**length of time**	**BSA**	**BSA = Biodegrades with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.51	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.62E-11	atm-m^3/mol		
Water Solubility	0.674	mg/L		
% water PBT profiler	**5**			

Contaminant	Calcium carbonate
Substance Key:	7087
Contaminant ID (CASRN):	471341

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
1	3	8	7

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/CAL DHS 90%: 0.36

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**60,000**	**mg/kg-d**	**1994**	**Gastrointestinal - hypermotility, diarrhea, Gastrointestinal - other changes**	**Lowest Observed Adverse Effect Level; EPASR United States Environmental Protection Agency, Office of Pesticides and Toxic Substances. (U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460) History unknown. Volume(issue)/page/year #86940001000,1994**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	6,450	mg/kg	1972	Details of toxic effects not reported other than lethal dose value	28ZPAK "Sbornik Vysledku Toxixologickeho Vysetreni Latek A Pripravku," Marhold, J.V., Institut Pro Vychovu Vedoucicn Pracovniku Chemickeho Prumyclu Praha, Czechoslovakia, 1972 Volume(issue)/page/year -,267,1972
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140,000	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,848	11,811	99.7	100	426,000,000	158,000	389,000	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 0.36	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Antacid; food additive; pesticide; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	**Insol.**	**mg/L**		
% water PBT profiler				

Contaminant	Calcium hydroxide
Substance Key:	11051
Contaminant ID (CASRN):	1305620

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	10

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL/No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**7,300**	**mg/kg**	**1981**	**Details of toxic effects not reported other than lethal dose value**	**YKYUA6 Yakkyoku. Pharmacy. (Nanzando, 4-1-11, Yushima, Bunkyo-ku, Tokyo, Japan) V.1-1950- Volume(issue)/page/year 32,1477,1981**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Cancelled pesticide; lubricant; veterinary medication; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	**1,730**	**mg/L**		
% water PBT profiler				

Contaminant	Calcium octadecanoate
Substance Key:	11834
Contaminant ID (CASRN):	1592230

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL/No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**10,000**	**mg/kg**	**1992**	**Details of toxic effects not reported other than lethal dose value**	**GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 36(4),17,1992**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Polymer stabilizer; food additive; waterproofing (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	40	mg/L		
% water PBT profiler	**2**			

Contaminant	Caprolactam
Substance Key:	4466
Contaminant ID (CASRN):	105602

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	7	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.5**	**mg/kg-d**	**1988**	**Reduced offspring body weight**	**Reference Dose; Serotta et al., 1984; Basis NOAEL 50 mg/kg/day, rat, UF=100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.5	mg/kg-d		Reduced offspring body weight	Reference Dose; Serotta et al., 1984; Basis NOAEL/LOAEL, rat, UF=100, MF = 1
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	482	mg/kg-d		Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0555505
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	4				Vol. 39, Suppl. 7; Vol. 71; 1999
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,500	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	In polymer synthesis (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**57.4**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.52E-08	atm-m^3/mol		
Water Solubility	772,000	mg/L		
% water PBT profiler				

Contaminant	Carbaryl
Substance Key:	2448
Contaminant ID (CASRN):	63252

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	8	1	5

3-model Categorical Prediction
NL-NL?
HRL Ratio(s)
NC HRL/NCOD R2 90%: 70 CAR HRL/NCOD R2 90%: 40

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.01	mg/kg-d		Plasma & brain ChE inhibition. Q1* 0.000875 (mg/kg-day)-1 - Likely.	Reference Dose
EPA IRIS (ITER) RfD	0.1	mg/kg-d	1985	Kidney; liver	Reference Dose; Carpenter et al., 1961; Basis NOAEL 9.6 mg/kg/day, rat, UF=100, kidney & liver
EPA HA RfD	0.01	mg/kg-d	2006		Reference Dose
RAISHE RfD	0.1	mg/kg-d			Reference Dose; Carpenter et al., 1961; Basis NOAEL/LOAEL, rat, UF=100, kidney & liver
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.008	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.23	mg/kg-d	1975	Immunological Including Allergic - decrease in humoral immune response	Lowest Observed Adverse Effect Level; oral study in rabbit; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 32,587,1975
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor	**0.000875**	**$(mg/kg\text{-}d)^{-1}$**	**2003**	**incidence of hemangiosarcomas in mice**	**2002 and 2007 Carbaryl Occupational Risk Assessment in August 2008 Amended RED**
EPA Carcinogen classification	Likely to be carcinogenic in humans		2007		2003 and 2007 Carbaryl Occupational Risk Assessment in August 2008 Amended RED
IARC Carcinogen Classification	3				Vol. 12, Suppl. 7, 1987
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			EPA; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.4	mg/L	2006		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	ug/L			
Health Reference Level (HRL)[2] cancer	40	ug/L			
CADW MAC	0.09	mg/L			Canadian Drinking Water Maximum Allowable Concentration

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**12,679**	**13**	**0.103**	**0.18**	**3**	**0.18**	**1**	**3**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	7,142	697	9.76	0.0005	33.5	0.0167	0.138	1.2	ug/L	
NREC ambient surface water	85	14	16.5			0.04			ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water	85	14	17			0.17			ug/L	National Aggregate
NREC ambient ground water			0.12			0.9			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	4,857,542	lbs/yr	48	States	1997	
TRI Release - surface water	25	lbs/yr	3	States	2004	
TRI Release - total	3,475	lbs/yr	7	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
PDP	0.296							ug/L	Pesticide Data Program (USDA); 2001
PDP	0.550							ug/L	Pesticide Data Program (USDA); 2002
PPMP		2	0.9		0.041			ug/L	Pesticide Pilot Montoring Program (USGS/EPA) 2001 (GCMS)
PPMP		0	0		Not Detected			ug/L	Pesticide Pilot Montoring Program (USGS/EPA) 9060 (HPLC/MS)
CAL DHS	4,671	1	0.02	3.5	3.5	3.5	3.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratio (HRL/NCOD R2 90%)	Non-cancer: 70				Cancer: 40				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide; veterinary medication (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	length of time	BSA	BSA = Biodegrades slow with acclimation
K_{OC}, Organic Carbon Partition Coefficient	242	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.36	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.36E-09	atm-m^3/mol		
Water Solubility	110	mg/L		
% water PBT profiler	18			

Contaminant	Carbendazim
Substance Key:	21347
Contaminant ID (CASRN):	10605217

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	**0.03**	**mg/kg-d**	**1995**	**Liver effects: hepatic cirrhosis, swollen, vacuolated hepatic cells, & mild chronic hepatitis**	**Acceptable Daily Intake**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.588	mg/kg-d	1989	Brain and Coverings - other degenerative changes	Lowest Observed Adverse Effect Level; oral study in rat; TXCYAC Toxicology. (Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick, Ireland) V.1- 1973- Volume(issue)/page/year 57,173,1989
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	2,500	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	Dog; PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,123,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>1M-10M	**lbs/yr**	**2002**

Use	Fungicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**>35 days**	**length of time**	**DS**	**DS = Degrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	350	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.10E-11	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**33**			

Contaminant	Carbon disulfide
Substance Key:	2629
Contaminant ID (CASRN):	75150

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	10	3

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
NC HRL/NAWQA 90%: 5,426

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**	**1987**	**Fetal toxicity/malformations**	**Reference Dose; Basis NOEL = 11 mg/kg-d, rabbit, oral, UF = 100 (Hardin et al., 1981)**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.1	mg/kg-d		Fetal toxicity/malformations	Reference Dose; Basis NOEL, MF = 1, UF = 100, rabbit (Hardin et al., 1981)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	139	mg/kg-d	1966	Cardiac - changes in heart weight, Endocrine - hyperglycemia, Immunological Including Allergic - decrease in cellular immune response	Lowest Observed Adverse Effect Level; 26-week oral study in rabbit; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 31(1),13,1966
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,200	mg/kg		Details of toxic effects not reported other than lethal dose value	INHEAO Industrial Health. (National Institute of Industrial Health, 6-21-1 Nagao, Tama-ku, Kawasaki, 213 Japan) V.1- 1963- Volume(issue)/page/year 32,145,1994
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; UMD
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental (male & female); Teratogen	CACART; UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	**2,606**	**606**	**23.3**	**0.001**	**34**	**0.02**	**0.129**	**3.4**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	6,902	lbs/yr	11	States	2004	
TRI Release - total	26,946,784	lbs/yr	32	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	1,075	4	0.37	0.55	34	14.4	29.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 5,426	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100 - 500M	lbs/yr	1998			
	>10 - 50M	lbs/yr	2002			

Use	Former insecticide/fumigant; rubber additive; industrial solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS =Biodegrades slow (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0144	atm-m^3/mol		
Water Solubility	1,180	mg/L		
% water PBT profiler				

Contaminant	Catechol
Substance Key:	5350
Contaminant ID (CASRN):	120809

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**65**	**mg/kg-d**	**2001**	**Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol) IARC say that it causes hyperplacia of the fore stomach and pyloric mucosa which is consistent with the cancer response but does not identify the study or dose.**	**Lowest Observed Adverse Effect Level; JTPAE7 Journal of Toxicologic Pathology. (Nihon Dokusei Byori Gakkai, editor, 3-25-8 Nishi- shinbashi, Minato-ku, Tokyo 105, Japan) V.1- 1988 Volume(issue)/page/year 29,180,2001**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	152	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	26,494	lbs/yr	25	States	2004	
TRI Release - total	**35,911**	**lbs/yr**	**30**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	lbs/yr	2002

Use	Chemical antioxidant; chemical intermediate for insecticides and PPCPs (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	118	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.88	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.20E-09	atm-m^3/mol		
Water Solubility	461,000	mg/L		
% water PBT profiler	37			

Contaminant	CFC-11
Substance Key:	2673
Contaminant ID (CASRN):	75694

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/NCOD R1 90%: 247

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.3**	**mg/kg-d**	**1987**	**Survival & histopathology. Increased mortality, incidence of pleuritis & pericalditis**	**Reference Dose; Basis LOAEL = 488 mg/kg-d, Adjusted Basis LOAEL = 349 mg/kg-d, UF = 1000, rat, oral (NCI, 1978)**
EPA HA RfD	0.3	mg/kg-d			Reference Dose
RAISHE RfD	0.7	mg/kg-d		Survival & histopathology	Reference Dose; Basis LOAEL, MF = 1, UF = 1000, rat & mouse (NCI, 1978)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	10	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,100	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**16,851**	**249**	**1.48**	**0.01**	**1,444**	**1.3**	**8.5**	**72**	**ug/L**	
NCOD Round 2 finished water	23,341	265	1.14	0.0014	105	0.85	5	24.9	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,340	104	2.4	0.007	24	0.143	1.1	17	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	54	lbs/yr	3	States	2004	
TRI Release - total	266,643	lbs/yr	13	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	12,179	51	0.42	0.5	46	1.8	13.4	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 247				Cancer:					

Production	Amount Range	Units	Year			
CUSIUR Production Data	100M-500M	lbs/yr	1990			
	50M-100M	lbs/yr	1994			

Use	Former pesticide; chemical intermediate; in fire extinguishers; in insulation blowing; in aerosols - major uses now phased out (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	48.6	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.53	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0971	atm-m^3/mol		
Water Solubility	1,100	mg/L		
% water PBT profiler				

Contaminant	CFC-12
Substance Key:	2674
Contaminant ID (CASRN):	75718

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 77.8

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.2**	**mg/kg-d**		**Reduced body weight**	**Reference Dose; Basis NOAEL = 15 mg/kg-d, rat, UF = 100, oral (Sherman, 1974)**
EPA HA RfD	0.2	mg/kg-d			Reference Dose
RAISHE RfD	0.2	mg/kg-d		Reduced body weight	Reference Dose; Basis NOAEL/LOAEL, MF = 1, UF = 100, rat, whole body (Sherman, 1974)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	14	mg/kg-d	1987	Behavioral - alteration of classical conditioning, Blood - changes in erythrocyte (RBC) count, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; 26-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 52(3),73,1987
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	5	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**16,076**	**221**	**1.37**	**0.1**	**405**	**2**	**18**	**200**	**ug/L**	
NCOD Round 2 finished water	22,145	285	1.29	0.1	230	1.22	8	27.7	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,341	108	2.49	0.01	38	0.2	0.6	4.3	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	10	lbs/yr	2	States	2004	
TRI Release - total	224,225	lbs/yr	15	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	12,205	271	2.22	0.5	160	2.4	6.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 77.8	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	100M-500M	lbs/yr	1990			
	100M-500M	lbs/yr	1994			

Use	Former pesticide; in insulation blowing; in aerosols - major uses now phased out (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	48.6	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.343	atm-m^3/mol		
Water Solubility	280	mg/L		
% water PBT profiler	48			

Contaminant:	Chloral Hydrate
Substance Key:	6463
Contaminant ID (CASRN):	302170

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/DBP ICR 90%: 58.3

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**	**2000**	**CNS depression and GI irritation**	**Reference Dose; basis LOAEL - 10.7 mg/kg-d, UF = 100, oral human study; Goodman and Gilman, 1985.**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1	mg/kg-d		Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936-
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
DSSTOX TD_{50}	106	mg/kg-d			Tumorigenic Dose - 50
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1995		
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR finished water	**10,911**	**7,913**	**72.5**	**5.47**	**92.2**	**4**	**12**		**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., 2006			75		16	1		ug/L	Finished drinking water monitoring; Krasner, *et al* , 2006. *Env. Sci. Technol.* , 40, pp 7175-7185 (and related documentation).

HRL Ratios (HRL/DBP ICR 90%)	Non-cancer: 58.3				Cancer:	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Sedative; hypnotic; in organic synthesis (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	82	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.99	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.71E-09	atm-m^3/mol		
Water Solubility	793,000	mg/L		
% water PBT profiler	41			

Contaminant	Chlorendic acid
Substance Key:	5103
Contaminant ID (CASRN):	115286

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.091**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1990		Vol. 48
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N			CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.385	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
	>500K - 1M	lbs/yr	2002

Use	Flame retardant in textiles and building materials (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	49	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.00E-14	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	6			

Contaminant	Chlorethoxyfos
Substance Key:	36627
Contaminant ID (CASRN):	54593838

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	7	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 52.5

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0006**	**mg/kg-d**		**Plasma, RBC, and/or Brain ChE inhibition**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.0495	1996		Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	TOXID9 Toxicologist. (Soc. of Toxicology, Inc., 475 Wolf Ledge Parkway, Akron, OH 44311) V.1- 1981- Volume(issue)/page/year 30,124,1996
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	2	mg/kg		Behavioral - somnolence (general depressed activity), Behavioral - food intake (animal), Gastrointestinal - changes in structure or function of salivary glands	NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0536238
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4.2	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**252,792**	**lbs/yr**	**10**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data									Notes
OPP Estimated Environmental Concentration		Surface water chronic: 0.08 ug/L				Ground water chronic: 0.002 ug/L			
HRL Ratios (HRL/SW Chronic EEC)		Non-cancer: 52.5			Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	4.3-59 days	length of time	DST	DST = Degrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	890	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.20E-06	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	5			

Contaminant:	Chloroacetaldehyde
Substance Key:	4598
Contaminant ID (CASRN):	107200

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	5

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
DSSTOX TD_{50}	36.1	mg/kg-d			Tumorigenic Dose - 50
EPA Carcinogen classification					
IARC Carcinogen Classification					
DSSTOX Carcinogen Classification	LM				DSSTOX; LM = Low to medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			DSSTOX
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al.			**50**		**2.4**	**0.2**		**ug/L**	**Finished drinking water monitoring; Krasner, *et al* , 2006. *Env. Sci. Technol.* , 40, pp 7175-7185 (and related documentation).**

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	BS = Biodegrades Slow
K_{OC}, Organic Carbon Partition Coefficient	39	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.39	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.39E-05	atm-m^3/mol		
Water Solubility	111,000	mg/L		
% water PBT profiler	45			

Contaminant	Chloroacetyl chloride
Substance Key:	2856
Contaminant ID (CASRN):	79049

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	208	mg/kg	1991		Rat (American Conference of Governmental Industril Hygeinists, Inc. Documentation of the Threshold Limit Values and Biological Exposure Indices. 6th ed. Volumes I, II, III. Cincinnati, OH: ACGIH, 1991., p.
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Supplemental Lowest Oral LD50	**207**	**mg/kg**		**Weakness and collapse; effects on lungs liver and gastrointestinal tract on necropsy**	**OPPTS; Monsanto study 1992 OST0536760**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			UMD
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M - 500M	lbs/yr	1998
	>100M - 500M	**lbs/yr**	**2002**

Use	Chemical intermediate; tear gas (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	4	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.22	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00023	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**43**			

Contaminant	Chlorobenzilate
Substance Key:	7384
Contaminant ID (CASRN):	510156

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.02	mg/kg-d	1989	Decreased food intake, weight gain, stool quantity, and hyperirritablility	Reference Dose; Basis NOEL = 5 mg/kg-d, rabbit, oral (Ciba-Geigy, 1984a)
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d			Reference Dose; Basis NOEL/LEL, MF = 1, UF = 300, rabbit (Ciba-Geigy Corp.,1984)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d	1980		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	35.3	mg/kg-d	1972	Immunological Including Allergic - decrease in cellular immune response	Lowest Observed Adverse Effect Level; 17-week oral study in rat; FATOAO Farmakologiya i Toksikologiya (Moscow). For English translation, see PHTXA6 and RPTOAN. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.2- 1939- Volume(issue)/page/year 35(3),352,1972
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.27	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.11**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1987		Vol. 30, Suppl. 7, 1987
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; OEHHA; RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer	0.318	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**5**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	117	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:			Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Former pesticide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1,263	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.74	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.24E-08	atm-m^3/mol		
Water Solubility	13	mg/L		
% water PBT profiler				

Contaminant	Chloroethane
Substance Key:	2616
Contaminant ID (CASRN):	75003

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		4	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 52, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; Equivocal evidence of carcinogenicity in male and female rats; clear evidence in female mice; inadequate study in male mice (NTP).
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	20,236	78	**0.385**	0.10	112	1.00	9.7	64	ug/L	
NCOD Round 2 finished water	24,433	84	0.344	0	288	**1.30**	6.85	84.5	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,271	39	0.913	0.0175	40	0.06	1	40	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	586	lbs/yr	5	States	2004	
TRI Release - total	732,853	lbs/yr	15	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,930	44	0.37	0.5	46	1.3	2.3	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	lbs/yr	2002			

Use	Chemical intermediate; solvent; refrigerant; medication (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	23.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.43	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0111	atm-m^3/mol		
Water Solubility	6.71	mg/L		
% water PBT profiler				

Contaminant	Chloromethyl methyl ether
Substance Key:	4605
Contaminant ID (CASRN):	107302

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	2	3

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**2.4**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	A		1988		Oral
IARC Carcinogen Classification	1				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; UMD; IARC;OEHHA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.0146	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**1,085**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	lbs/yr	2002

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	2.38	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000303	atm-m^3/mol		
Water Solubility	69,400	mg/L		
% water PBT profiler				

Contaminant	Chlorophenol
Substance Key:	28429
Contaminant ID (CASRN):	25167800

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	6	6

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.005**	**mg/kg-d**		**Reproductive effects - 0rtho isomer**	**Reference Dose**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.003	mg/kg-d	2000	Immune system- Rat	Tolerable Daily Intake; Basis NOAEL = 0.3 mg/kg-d, rat, UF = 100, oral (Exon and Koller, 1985)
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	570	mg/kg		Details of toxic effects not reported other than lethal dose value	Rat, oral; BSLIB Biochemistry Section, Laboratory Investigations Branch, DRDS, ALOSH, NIOSH Volume(issue)/page/year -,1,1979
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	76	lbs/yr	1	States	2004	
TRI Release - total	**43,439**	**lbs/yr**	**6**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Chemical intermediate; disinfectant; veterinary medication (HSDB - uses for 2-chlorophenol, 3-chlorophenol and 4-chlorophenol)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.15E-07	atm-m^3/mol		
Water Solubility	28,500	mg/L		
% water PBT profiler	29			

Contaminant	Chloropicrin
Substance Key:	2704
Contaminant ID (CASRN):	76062

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/DBP ICR 90%: 93.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d	1965		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**32**	**mg/kg-d**		**Gastrointestinal - other changes, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect Level; (DCTODJ Drug and Chemical Toxicology. (Marcel Dekker, 270 Madison Ave., New York, NY 10016) V.1- 1977/78- Volume(issue)/page/year 17,125,1994)**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	74.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	
DBP ICR	**10,905**	**2,837**	**26.02**	**1**	**13.6**	**0.8**	**1.61**		**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	13,882,188	lbs/yr	29	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	14,865	lbs/yr	8	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS	4	1	25	0.5	1.5	1	1.4	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	75% of Detects	Units for Mag data	Notes
Krasner, et al.	12	6	50		2	0.2	0.4	ug/L	Finished drinking water monitoring; Krasner, et al, 2006. *Env. Sci. Technol.*, 40, pp 7175-7185 (and related documentation).

HRL Ratios (HRL/DBP ICR 90%)	Non-cancer: 93.4	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr				
	1M-10M	lbs/yr	1986			

Use	Rodenticide; fumigant; tear gas (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	81	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.09	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00205	atm-m^3/mol		
Water Solubility	1,621	mg/L		
% water PBT profiler	40			

Contaminant	Chloroprene
Substance Key:	5636
Contaminant ID (CASRN):	126998

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	2	3	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.02**	**mg/kg-d**		**Alopecia**	**Reference Dose; Basis NOAEL, MF = 1, hair, rat, UF = 100 (USEPA, 1989).**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.05	mg/kg-d	1980	Liver - changes in liver weight, Endocrine - changes in spleen weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - dehydrogenases	Lowest Observed Adverse Effect Level; 26-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 45(2),17,1980
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N			CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	74	lbs/yr	1	States	2004	
TRI Release - total	**925,010**	**lbs/yr**	**3**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M - 500M	lbs/yr	1998
	>100M - 500M	lbs/yr	2002

Use	Chemical intermediate; in adhesives (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	67.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.53	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.056	atm-m^3/mol		
Water Solubility	875	mg/L		
% water PBT profiler	74			

Contaminant	Chlorothalonil
Substance Key:	12375
Contaminant ID (CASRN):	1897456

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	4	4

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 342
CAR HRL/NAWQA 90%: 3.66

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.02**	**mg/kg-d**		**Increased kidney weights & hyperplasia of the proximal convoluted tubules in the kidneys, ulcers & forestomach hyperplasia. Q1* 0.00766 (mg/kg-day)-1. Group B2. See CAR**	**Reference Dose**
EPA IRIS (ITER) RfD	0.015	mg/kg-d	1987	Renal tubular epithelial vacuolation	Reference Dose; Basis NOEL = 1.5 mg/kg/day, UF = 100, kidney, dog, oral (Diamod Shamrock Chemical, 1970a)
EPA HA RfD	0.015	mg/kg-d			Reference Dose
RAISHE RfD	0.015	mg/kg-d		Tubular epithelial vacuolation	Reference Dose; Basis NOEL/LEL, MF = 1, kidney, dog, UF = 100 (Diamod Shamrock Chemical, 1970)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d	1994		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data; OPP RfD
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	1.5	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	75	mg/kg-d	1990	Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis), Kidney, Ureter, Bladder - changes in bladder weight	Lowest Observed Adverse Effect Level; 90-day oral study in rat; TOLED5 Toxicology Letters. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1977- Volume(issue)/page/year 53,155,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.15	mg/L			
EPA Lifetime Cancer Risk, 10^{-5}	0.5	mg/L			Corresponds with OPP slope factor.
RAISHE Slope Factor	0.011	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.0031	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor	0.00766	$(mg/kg\text{-}d)^{-1}$			OPP
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B		1999		Vol. 73, 1999; note: OEHHA lists IARCs cancer class as 3.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; EPA; OEHHA; RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N			CACART
EPAHA-DWEL	0.5	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer	1.5	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**4,547**	**15**	**0.33**	**0.007**	**0.71**	**0.05**	**0.41**	**0.71**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	11,916,713	lbs/yr	48	States	1997	
TRI Release - surface water	6	lbs/yr	2	States	2004	
TRI Release - total	303,181	lbs/yr	7	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	4,099	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
PDP	29			Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Data Program (USDA)
PPMP		0		Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Ambient (HPLC/MS)
PPMP		0		Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Finished (HPLC/MS)

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 342	Cancer: 3.66	

Production	Amount Range	Units	Year			Notes
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Fungicide; bacteriocide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	2,392	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.05	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.00E-06	atm-m^3/mol		
Water Solubility	0.6	mg/L		
% water PBT profiler				

Contaminant	Cinnamaldehyde
Substance Key:	4388
Contaminant ID (CASRN):	104552

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	5	7

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**550**	**mg/kg-d**		**Slight decrease in body weight**	**Supplemental Data; Journal; Bickers, et al. Food and Chemical Toxicology 43 (2005) 799-836**
RTECS Lowest Oral Chronic LOAEL	0.208	mg/kg-d	1992	Liver - changes in liver weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - hepatic microsomal mixed oxidase (dealkylation, hydroxylation, etc.), Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 24-week oral study in rat; BECTA6 Bulletin of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) V.1- 1966- Volume(issue)/page/year 49,306,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,160	mg/kg		Behavioral - coma	FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 2,327,1964
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,850	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Food additive; attractant in insect control (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.19	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,420	mg/L		
% water PBT profiler	**33**			

Contaminant	Citric acid
Substance Key:	2776
Contaminant ID (CASRN):	77929

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	8	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	100	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD); MRDDs were only used for screening, not for attribute scoring.
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**620**	**mg/kg-d**		**Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other transferases, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol)**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year -,65,1993**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,000	mg/kg		Details of toxic effects not reported other than lethal dose value	OYYAA2 Oyo Yakuri. Pharmacometrics. (Oyo Yakuri Kenkyukai, CPO Box 180, Sendai 980-91, Japan) V.1- 1967- Volume(issue)/page/year 43,561,1992
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,447	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Food additive; medication; pesticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	3.1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.64	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.30E-14	atm-m^3/mol		
Water Solubility	383,000	mg/L		
% water PBT profiler	**34**			

Contaminant	Clomazone
Substance Key:	66450
Contaminant ID (CASRN):	81777891

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	7	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/ SW Chronic EEC: 256

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.84**	**mg/kg-d**		**Hydronephrotic kidneys in male offspring, decreased body weight, decreased pup weight**	**Reference Dose; TRED**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,369	mg/kg		Details of toxic effects not reported other than lethal dose value	PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,178,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	5,880	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**2,531,160**	**lbs/yr**	**36**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data									Notes
OPP Estimated Environmental Concentration		Surface water chronic: 23 ug/L				Ground water chronic: 2.4 ug/L			
HRL Ratios (HRL/ SW Chronic EEC)		Non-cancer: 256				Cancer:			

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	60-573	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.13E-08	atm-m^3/mol		
Water Solubility	1,100	mg/L		
% water PBT profiler	18			

Contaminant	Cobalt compounds
Substance Key:	38
Contaminant ID (CASRN):	

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**72**	**mg/kg-d**		**decreased fertility and preimplantation loss**	**Supplemental Data; Journal; Pedogo and Vernon 1993; Chemical tested for the supplemental LOAEL was $CoCl_2$.**
HSDB Lowest Oral LD50	150	mg/kg	1982		Speijers, G., et al; Food Chem Toxicol., 20(3): 311-314. Rat study
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	168	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	86,313	lbs/yr	30	States	2004	
TRI Release - total	**6,910,811**	**lbs/yr**	**45**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Food additives as drying agents; glass additives; catalysts (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Coumarin
Substance Key:	3492
Contaminant ID (CASRN):	91645

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	5	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level (2006)
Supplemental NOEL		mg/kg-d			Supplemental Data (2006)
RTECS Lowest Oral Chronic LOAEL	100	mg/kg-d	1956/1982	Liver - jaundice, other or unclassified, Blood - hemorrhage, Related to Chronic Data - death; Liver - hepatitis (hepatocellular necrosis), diffuse, Liver - liver function tests impaired, Blood - changes in platelet count	Lowest Observed Adverse Effect Level from two studies: JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1-1909/10- Volume(issue)/page/year 118,348,1956. NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0555582.
Supplemental LOAEL	**16**	**mg/kg-d**	**2006**	**Hepatotoxicity; liver effects.**	**Supplemental Data; Journal; Food and Chemical Toxicology 44 (2006) 462-475**
Supplemental LOAEL	1.67	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	37.3	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Former pesticide; former food additive (suspended 1954); in PPCPs (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	140	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.39	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.90E-08	atm-m^3/mol		
Water Solubility	1,900	mg/L		
% water PBT profiler	**38**			

Contaminant	Cresol
Substance Key:	11192
Contaminant ID (CASRN):	108394

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	9

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**256**	**mg/kg-d**		**Increased absolute and relative liver weight**	**Supplemental Data; NTP; NTP Tox-09**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	760	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	597	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	61,486	lbs/yr	23	States	2004	
TRI Release - total	**1,475,929**	**lbs/yr**	**35**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			

Use	Cancelled pesticide; chemical intermediate; degreaser; veterinary medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	22	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.95	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.20E-06	atm-m^3/mol		
Water Solubility	25,900	mg/L		
% water PBT profiler	32			

Contaminant	Cryolite
Substance Key:	24566
Contaminant ID (CASRN):	15096523

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	8	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	23.1	mg/kg-d		Behavioral - food intake (animal), Liver - other changes, Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; BGTOX BG Chemie Toxicological Evaluations, Five Potential Health Hazards of Existing Chemicals. (Springer-Verlag New York, POB 2485, Secaucus, NJ 07096).
Supplemental LOAEL	**95**	**mg/kg-d**		**Increases in emesis, nucleated cells in males, renal lesions, and a decrease in urine specific gravity.**	**Supplemental Data; EPA OPP (RED)**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	5,000	mg/kg		Gastrointestinal - changes in structure or function of salivary glands, Skin and Appendages - hair	BAYER (Bayer. AG, Institute fur Toxikologie, Wuppertal, Germany) Volume(issue)/page/year #15722,1987
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	222	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**2,560,365**	**lbs/yr**	**13**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Insecticide; industrial electrolyte; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	Assumed persistent	length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	250-320	mg/L		
% water PBT profiler				

Contaminant	Cupferron
Substance Key:	5877
Contaminant ID (CASRN):	135206

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.22**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.159	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Laboratory reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	Freely soluble	mg/L		
% water PBT profiler	39			

Contaminant	Cure-Rite 18
Substance Key:	23329
Contaminant ID (CASRN):	13752517

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**35.5**	**mg/kg-d**		**Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis), Kidney, Ureter, Bladder - other changes, Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0536514**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	82.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Rubber accelerator (West Coast Polychem.com - manufacturer)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**47**			

Contaminant	Cyanazine
Substance Key:	27282
Contaminant ID (CASRN):	21725462

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	9	4

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/NAWQA 90%: 16.5
CAR HRL/NAWQA 90%: 0.049

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	0.002	mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		Reduced body weight and body weight gain, increased platelet count, decreased protein, albumin and calcium	Reference Dose; USEPA, 1993; Basis NOEL, dog, UF = 300
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.985	mg/kg-d	2000	Behavioral - food intake (animal), Reproductive - Maternal Effects - breasts, lactation (prior to or during pregnancy), Tumorigenic - carcinogenic by RTECS criteria	Lowest Observed Adverse Effect Level; 371-day oral study in rat; JTEHD6 Journal of Toxicology and Environmental Health. (Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005) V.1-1975/76- Volume(issue)/page/year 60,567,2000
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.84**	**$(mg/kg\text{-}d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAIS
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental; Teratogen	CACART; UMD
EPAHA-DWEL	0.07	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	µg/L			
Health Reference Level (HRL)[2] cancer	0.042	µg/L			
WHODWQ	0.6	µg/L			World Health Organization Drinking Water Guide
CADW IMAC	0.01	mg/L			Canadian Drinking Water Interim Maximum Allowable Concentration

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,164**	**590**	**8.24**	**0.002**	**160**	**0.039**	**0.849**	**6.7**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	20,233,056	lbs/yr	48	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	370	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP	317							ug/L	Pesticide Data Program (USDA) 2002
PPMP		145	44.9		0.332		0.007	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Ambient
PPMP		3	42.1		0.355		0.128	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Finished
CAL DHS	33	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 16.5	Cancer: 0.049	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Cancelled herbicide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	124	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.22	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.96E-12	atm-m^3/mol		
Water Solubility	170	mg/L		
% water PBT profiler				

Contaminant:	Cyanogen chloride
Substance Key:	7358
Contaminant ID (CASRN):	506774

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/DBP ICR 90%: 43.8

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.05**	**mg/kg-d**	**1995**	**Weight loss, thyroid effects and myelin degenration**	**Reference Dose; basis NOAEL = 25.3 mg/kg-d, UF/MF = 500; chronic oral rat study; Howard and Hanzal, 1955.**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
WHO TDI	0.054	mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	2	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR finished water	**1,745**	**1,358**	**78**	**3.69**	**21**	**2.7**	**8**		**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# Samples	# with Detects	% Samples w/ Detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/DBP ICR 90%)	Non-cancer: 43.8				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Military gas; warning agent in fumigants; in chemical sysnthesis (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.50E-02	atm-m^3/mol		
Water Solubility	60,000	mg/L		
% water PBT profiler	44			

Contaminant	Cyanuric acid
Substance Key:	4719
Contaminant ID (CASRN):	108805

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	150	mg/kg-d		Functional and histopatological effects in the kidney; increases in absolute and relative kidney weights and relative adrenal weights.	No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**30**	**mg/kg-d**	**1962**	**Kidney, Ureter, Bladder - other changes, Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect Level; 26-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-1936- Volume(issue)/page/year 27(12),13,1962; The LOAEL was used for Potency scoring because it was lower than the NOEL from other studies.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,400	mg/kg		Details of toxic effects not reported other than lethal dose value	ZKMAAX Zhurnal Eksperimental'noi i Klinicheskoi Meditsiny. Journal of Experimental and Clinical Medicine. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.2- 1962- Volume(issue)/page/year 25,345,1985
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100-500M	lbs/yr	1998			
	>100-500M	**lbs/yr**	**2002**			

Use	Cancelled pesticide; laboratory reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	66-124	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.38E-18	atm-m^3/mol		
Water Solubility	2,000	mg/L		
% water PBT profiler	**23**			

Contaminant	Cyanuric chloride
Substance Key:	4716
Contaminant ID (CASRN):	108770

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**100**	**mg/kg-d**	**1992**	**Liver - changes in liver weight, Blood - pigmented or nucleated red blood cells, Related to Chronic Data - death**	**Lowest Observed Adverse Effect Level; TOXID9 Toxicologist. (Soc. of Toxicology, Inc., 475 Wolf Ledge Parkway, Akron, OH 44311) V.1- 1981- Volume(issue)/page/year 12,119,1992; 28 day study in rat**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	350	mg/kg		Behavioral - somnolence (general depressed activity), Behavioral - food intake (animal), Nutritional and Gross Metabolic - weight loss or decreased weight gain	GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 12(8),35,1968
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	233	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	10M-50M	lbs/yr	1998			
	100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**60**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	124	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.90E-07	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**34**			

Contaminant	Cyclanilide
Substance Key:	69562
Contaminant ID (CASRN):	113136779

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	7	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**21.2**	**mg/kg-d**	**1997**	**Liver - liver function tests impaired, Liver - other changes, Liver - changes in liver weight**	**Lowest Observed Adverse Effect Level; FEREAC Federal Register. (U.S. Government Printing Office, Supt. of Documents, Washington, DC 20402) V.1- 1936- Volume(issue)/page/year 62,28350,1997**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	208	mg/kg		Details of toxic effects not reported other than lethal dose value	FEREAC Federal Register. (U.S. Government Printing Office, Supt. of Documents, Washington, DC 20402) V.1- 1936- Volume(issue)/page/year 62,28350,1997
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	49.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**177,086**	**lbs/yr**	**9**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Fungicide; plant growth regulator (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	95 days	length of time	BST	BST = Biodegrades sometimes/reclaitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	194-565	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.31E-10	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Cyclohexane
Substance Key:	4884
Contaminant ID (CASRN):	110827

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**813**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**NPIRI Raw Material Data Handbook, Vol.1 Organic Solvents, 1974. (National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Laboratory, Lehigh Univ., Bethlehem, PA 18015) Volume(issue)/page/year 1,17,1974**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	56.9	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	10,761	lbs/yr	26	States	2004	
TRI Release - total	**4,761,999**	**lbs/yr**	**49**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	lbs/yr	2002			
Use						

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	160	cm^3/g		
log K_{OW}, Octanol Water Partition Coeff.	3.44	unitless		
Kd, Distribution coefficient		cm^3/g		
HLC, Henry's Law Constant	0.15	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	54			

Contaminant	Cyclohexanol
Substance Key:	4730
Contaminant ID (CASRN):	108930

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	10

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,400**	**mg/kg**		**Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - other changes, Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0538617**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	98	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	9,053	lbs/yr	3	States	2004	
TRI Release - total	**4,538,466**	**lbs/yr**	**13**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1B	lbs/yr	1998
	>500M-1B	lbs/yr	2002

Use	Solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	13-111	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.23	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00012	atm-m^3/mol		
Water Solubility	42,000	mg/L		
% water PBT profiler	41			

Contaminant	Cyclohexanone
Substance Key:	4731
Contaminant ID (CASRN):	108941

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	3	10	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**5**	**mg/kg-d**	**1986**	**Body weight depression**	**Reference Dose; Lijinsky and Kovatch, 1986; Basis NOAEL = 462 mg/kg-d, rat, UF = 100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	5	mg/kg-d		Body weight depression	Reference Dose; Lijinsky and Kovatch, 1986; Basis NOAEL/LOAEL, rat, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.05	mg/kg-d	1994	Behavioral - alteration of classical conditioning	Lowest Observed Adverse Effect Level; 90-day oral study in rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year - ,455,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Cancelled pesticide; degreasing agent; solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**15.2**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.81	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.00E-06	atm-m^3/mol		
Water Solubility	25,000	mg/L		
% water PBT profiler				

Contaminant	Cyclohexylamine
Substance Key:	4729
Contaminant ID (CASRN):	108918

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.2**	**mg/kg-d**		**Testicular damage. Testicular atrophy, decreased fertility & live young/litter**	**Reference Dose; Gaunt et al., 1976; Basis NOAEL = 18 mg/kg-d, rat, UF = 100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.2	mg/kg-d		Testicle	Reference Dose; Gaunt et al., 1976; Basis NOAEL/LOAEL, rat, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	97.8	mg/kg-d	1958	Liver - other changes, Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; 1-year oral study in rat;VOONAW Voprosy Onkologii. Problems of Oncology. For English translation, see PONCAU. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-10, 1928-37; V.1- 1955- Volume(issue)/page/year 4,659,1958
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	11	mg/kg		Behavioral - food intake (animal), Lungs, Thorax, or Respiration - pulmonary emboli, Gastrointestinal - other changes	NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0534836
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Chemical intermediate; boiler water additive; rubber accelerant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**40.4**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.49	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.16E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Cyfluthrin
Substance Key:	48890
Contaminant ID (CASRN):	68359375

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 1,346

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.025**	**mg/kg-d**	**1986**	**Decreased body weights in males, inflammatory foci in kidneys of females**	**Reference Dose; Mobay Chemical, 1983a; Basis NOEL = 2.5 mg/kg-d, rat, UF = 100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.025	mg/kg-d		Decreased body weights in males, inflammatory foci in kidneys of females	Reference Dose; Mobay Chemical, 1983a; Basis NOEL/LEL, rat, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake; from JECFA evaluation
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	300	mg/kg		Details of toxic effects not reported other than lethal dose value	85KYAH "Merck Index; an Encyclopedia of Chemicals, Drugs, and Biologicals", 11th ed., Rahway, NJ 07065, Merck & Co., Inc. 1989 Volume(issue)/page/year 11,432,1989
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**177,782**	**lbs/yr**	**29**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	134							ug/L	Pesticide Data Program (USDA) 2001
PDP	265							ug/L	Pesticide Data Program (USDA) 2002
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Finished and Ambient

OPP Estimated Environmental Concentration	Surface water chronic: 0.13 ug/L	Ground water chronic: 0.00336 ug/L	
HRL Ratios (HRL/SW Chronic EEC)	Non-cancer: 1,346	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	179,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.95	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-10	atm-m^3/mol		
Water Solubility	0.003	mg/L		
% water PBT profiler	1			

Contaminant	Cypermethrin
Substance Key:	35676
Contaminant ID (CASRN):	52315078

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	10	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SW Chronic EEC: 32,308

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.06**	**mg/kg-d**		**Clinical signs of neurotoxicity & mortality; decreased body weight & body weight gain**	**Reference Dose; ICI Americas, Inc., 1982a**
EPA IRIS (ITER) RfD	0.01	mg/kg-d	1989	G.I tract disturbances	Reference Dose; ICI Americas, Inc., 1982a; Basis NOEL = 1 mg/kg-d, dog, UF = 100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.01	mg/kg-d		G.I tract	Reference Dose; ICI Americas, Inc., 1982a; Basis NOEL/LEL, dog, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.05	mg/kg-d	1996		Acceptable Daily Intake; from JECFA evaluation
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	25	mg/kg-d	1985	Immunological Including Allergic - decrease in cellular immune response, Immunological Including Allergic - decrease in humoral immune response	Lowest Observed Adverse Effect Level; 13-week oral study in rat; ATSUDG Archives of Toxicology, Supplement. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) No.1- 1978- Volume(issue)/page/year 8,305,1985
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	24.6	mg/kg		Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold, Gastrointestinal - changes in structure or function of salivary glands	JEBIDP Journal of Environmental Biology. (Academy of Environmental Biology, India, 657/5, Civil Lines (South), Muzaffarnagar, 251001, India) V.1- 1980- Volume(issue)/page/year 11,331,1990
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	420	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**187,991**	**lbs/yr**	**29**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	134							ug/L	Pesticide Data Program 2001
PDP	380							ug/L	Pesticide Data Program 2002
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Finished and Ambient

OPP Estimated Environmental Concentration	Surface water chronic: 0.013 ug/L	Ground water chronic: 0.0036 ug/L	
HRL Ratios (HRL/SW Chronic EEC)	Non-cancer: 32,308	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide; veterinary medication (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	108,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	6.06	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.21E-07	atm-m^3/mol		
Water Solubility	0.004	mg/L		
% water PBT profiler	1			

Contaminant	Cyromazine
Substance Key:	42395
Contaminant ID (CASRN):	66215278

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	7	3

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0075**	**mg/kg-d**		**Effects on hematocrit & hemoglobin levels**	**Reference Dose; Ciba-Geigy, 1980; Basis NOEL = 0.75 mg/kg-d, dog, UF = 100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0075	mg/kg-d		Blood	Reference Dose; Ciba-Geigy, 1980; Basis NOEL/LEL, dog, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,387	mg/kg		Details of toxic effects not reported other than lethal dose value	PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,217,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	52.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**14,297**	**lbs/yr**	**6**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Insecticide; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	2,104	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.96	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.65E-14	atm-m^3/mol		
Water Solubility	13,000	mg/L		
% water PBT profiler	44			

Contaminant	Dacthal
Substance Key:	12322
Contaminant ID (CASRN):	1861321

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	9	2

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 2,800

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.01**	**mg/kg-d**		**Effects on the lungs, liver, kidney (chronic nephropathy), thyroid. Decreased T4 & T3. Centrilobular hepatocyte swelling (hepatocytic hypertrophy)**	**Reference Dose; ISK Biotech Corp., 1993**
EPA IRIS (ITER) RfD	0.01	mg/kg-d	1994	Lungs; liver; kidney; thyroid; eyes	Reference Dose; ISK Biotech Corp., 1993; Basis NOAEL = 1 mg/kg-d, rat, UF = 100
EPA HA RfD	0.01	mg/kg-d		Lungs; liver; kidney; thyroid;	Reference Dose; ISK Biotech Corp., 1993; Basis NOAEL/LOAEL, rat, UF = 100
RAISHE RfD	0.01	mg/kg-d			Reference Dose; ISK Biotech Corp., 1993; Basis NOAEL/LOAEL, rat, UF = 101
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1988		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.4	mg/L	1988		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,118**	**445**	**6.25**	**0.000004**	**100**	**0.003**	**0.025**	**1**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	596,723	lbs/yr	38	States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP	288							ug/L	Pesticide Data Program (USDA) 2001
PDP	582							ug/L	Pesticide Data Program (USDA) 2002
PPMP		16	5		0.014		0.002	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Ambient 2001 (GC/MS)
PPMP		8	3.5		0.004			ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Finished 2001 (GC/MS)
CAL DHS	286	1	0.35	0.21	0.21	0.21	0.21	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 2,800	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	283	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.28	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.18E-06	atm-m^3/mol		
Water Solubility	0.5	mg/L		
% water PBT profiler	12			

Contaminant	Dacthal mono/di-acid degradate
Substance Key:	79261
Contaminant ID (CASRN):	

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	9	7

Scores based on parent

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/UCMR 90%: 11.1 (HRL for parent Dacthal)

HEALTH EFFECTS DATA[1] **See Dacthal parent**

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.01**	**mg/kg-d**		**Effects on the lungs, liver, kidney (chronic nephropathy), thyroid. Decreased T4 & T3. Centrilobular hepatocyte swelling (hepatocytic hypertrophy)**	**Reference Dose (for parent, dacthal); ISK Biotech Corp., 1993**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			**Based on data for parent Dacthal**
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,612**	**171**	**4.73**	**1**	**190**	**2**	**6.3**	**18**	**ug/L**	**Analytical method reports mono- and di- as total.**
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,118	445	6.25	0.000004	100	0.003	0.025	1	ug/L	(data for parent, dacthal)
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	2,217	39	1.76	1	13	1.9	5.3	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/UCMR 90%)	Non-cancer: 11.1	Cancer:	HRL for parent Dacthal

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Degradates of the herbicide dimethyl tetrachloroterephthalate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Decabromodiphenyl ether
Substance Key:	10800
Contaminant ID (CASRN):	1163195

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	10	8

3-model Categorical Prediction
L?-L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.007**	**mg/kg-d**	**2008**	**Neurobehavioral effects**	**Reference Dose; Basis NOEL = 2.2 mg/kg, UF = 300, single-dose gavage in mice. Viberg, et al, 2003.**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.01	mg/kg-d			Reference Dose; Kociba et al., 1975; Basis NOAEL, rat, UF=100
ATSDR (ITER), MRL-Int	10	mg/kg-d	2004		Minimal Risk Level-Int
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	1	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	800	mg/kg-d	1975, 1994	Liver - other changes, Kidney, Ureter, Bladder - other changes, Endocrine - changes in thyroid weight (goiter)	Lowest Observed Adverse Effect Level; 30-day oral study in rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year - ,316,1994.
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	5	mg/L	2008		IRIS
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor	0.0007	$(mg/kg\text{-}d)^{-1}$	2008		IRIS
EPA Carcinogen classification	Suggestive evidence		2008		IRIS
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer	50	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	2,827	lbs/yr	9	States	2004	
TRI Release - total	**953,472**	**lbs/yr**	**26**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>50M-100M	lbs/yr	2002

Use	Flame retardant; polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	409,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	12.1	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.45E-08	atm-m^3/mol		
Water Solubility	0.025	mg/L		
% water PBT profiler	1			

Contaminant	Decamethylcyclopentasiloxane
Substance Key:	7678
Contaminant ID (CASRN):	541026

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**24,134**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0572801**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,689	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	In PPCPs; chemical intermediate; in petroleum processing (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	16,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.306	atm-m^3/mol		
Water Solubility	0.017	mg/L		
% water PBT profiler	**12**			

Contaminant	Desethylatrazine
Substance Key:	17458
Contaminant ID (CASRN):	6190654

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	10	3

Scores based on parent

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA 90%: 881 (HRL for parent Atrazine)

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.018**	**mg/kg-d**		**Attenuation of preovultory luteinizing hormone (LH) surge, as a biomarker indicative of hypothalmic function disruption**	**Reference Dose; evaluation is based on the RfD for parent (Atrazine).**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	126	µg/L			**Based on data for parent Atrazine**
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,151**	**2,963**	**41.4**	**Not Detected**	**10**	**0.017**	**0.143**	**0.738**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95th %ile value of Detects	Units for Mag data	Notes
PDP	317	154	48.6	0.0413	0.19			ug/L	2002
PDP	154	75	48.7	0.0413	0.22			ug/L	2001
PPMP		203	89		0.352		0.265	ug/L	
PPMP		167	74.6		0.267		0.201	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 881	Cancer:	HRL for parent Atrazine

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Degradation product of atrazine (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	24-30,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.51	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-09	atm-m^3/mol		
Water Solubility	3,200	mg/L		
% water PBT profiler				

Contaminant	Desisopropylatrazine
Substance Key:	10412
Contaminant ID (CASRN):	1007289

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	10	4

Scores based on parent

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA 90%: 200 (HRL for parent Atrazine)

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.018**	**mg/kg-d**		**Attenuation of preovultory luteinizing hormone (LH) surge, as a biomarker indicative of hypothalmic function disruption**	**Reference Dose; evaluation is based on the RfD for parent (Atrazine)**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	126	µg/L			**Based on data for parent Atrazine**
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**418**	**94**	**22.5**	**0.003**	**3.69**	**0.1**	**0.63**	**2.04**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% value of Detects	Units for Mag data	Notes
PDP	317	127	40.1	0.0163	0.0832			ug/L	2002
PDP	154	64	41.6	0.0163	0.073			ug/L	2001
PPMP		250	80.1		0.386		0.195	ug/L	
PPMP		146	64.9		0.178		0.081	ug/L	

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 200	Cancer:	HRL for parent Atrazine

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Degradation product of atrazine

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.15	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.16E-09	atm-m^3/mol		
Water Solubility	670	mg/L		
% water PBT profiler	41			

Contaminant	D-Glucose
Substance Key:	2156
Contaminant ID (CASRN):	50997

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	9	5

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**714**	**mg/kg-d**		**Increased heart rate; early dumping syndrome**	**Supplemental Data; Journal - Andrew Ukleja. Feb 2006. "Dumping Syndrome." Practical Gastroenterology. Series 35: Nutrition Issues in Gastroenterology. pp 32-46. (Series Editor: Carol Rees Parrish, RD, MS)**
Supplemental LOAEL	100	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	25,800	mg/kg		Behavioral - coma, Lungs, Thorax, or Respiration - cyanosis, Gastrointestinal - hypermotility, diarrhea	85AIAL "Toxicity of Pure Foods," Boyd, E.M., Cleveland, OH, CRC Press, 1973 Volume(issue)/page/year - ,39,1973
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,666	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>500M-1B	**lbs/yr**	**2002**			

Use	Food additive; in medical nutrient solutions; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**8.7 days**	**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-3.24	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,200,000	mg/L		
% water PBT profiler	**34**			

Contaminant	Diallyl glycol carbonate
Substance Key:	6128
Contaminant ID (CASRN):	142223

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	6	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**42.6**	**mg/kg-d**	**1999**	**Brain and Coverings - recordings from specific areas of CNS, Liver - liver function tests impaired, Kidney, Ureter, Bladder - renal function tests depressed**	**Lowest Observed Adverse Effect Level; TOVEFN Toksikologicheskii Vestnik. (18-20 Vadkovskii per. Moscow, 101479, Russia) History Unknown Volume(issue)/page/year (2),35,1999**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	279	mg/kg		Brain and Coverings - recordings from specific areas of CNS, Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - other changes	TOVEFN Toksikologicheskii Vestnik. (18-20 Vadkovskii per. Moscow, 101479, Russia) History Unknown Volume(issue)/page/year (2),35,1999
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	99.4	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**40**			

Contaminant	Diallyldimethylammonium chloride
Substance Key:	18770
Contaminant ID (CASRN):	7398698

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1,000**	**mg/kg-d**	**1984**	**Liver - other changes, Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis), Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect level, GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 28(7),53,1984; 6 week mammal study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	7,100	mg/kg		Details of toxic effects not reported other than lethal dose value	rodent-mouse; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 28(7),53,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,333	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.49	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Diazinon
Substance Key:	6596
Contaminant ID (CASRN):	333415

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 13.2

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0002**	**mg/kg-d**		**Plasma ChE inhibition**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	0.00009	mg/kg-d			Reference Dose
RAISHE RfD	0.0009	mg/kg-d		Decreased cholinesterase activity	Reference Dose; USEPA, 1984; Basis NOAEL, UF = 100
ATSDR (ITER), MRL	0.0002	mg/kg-d			Minimal Risk Level; Int
JMPR, maximum ADI	0.002	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.143	mg/kg-d	1986	Liver - fatty liver degeneration, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 28-week oral study in rat; BECTA6 Bulletin of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) V.1- 1966- Volume(issue)/page/year 37,501,1986
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.003	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.4	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			
CADW MAC	0.02	mg/L			Canadian Drinking Water Maximum Acceptable Concentration

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,115	815	11.45	0.0009	19	0.014	0.106	0.63	ug/L	
NREC ambient surface water	85	22	25.9			0.07			ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water			4.89			0.125			ug/L	National Aggregate
NREC ambient ground water			0.49			0.18			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	918,087	lbs/yr	37	States	1997	
TRI Release - surface water	10,287	lbs/yr	2	States	2004	
TRI Release - total	23,769	lbs/yr	7	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	95% of Detects	Units for Mag data	Notes
PDP	283	1	0.4	0.01	0.01				ug/L	Pesticide Data Program (USDA) 2001
PDP	658	1	0.2	0.01	0.01				ug/L	Pesticide Data Program (USDA) 2002
PPMP		114	35.3		0.101			0.002	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Ambient
CAL DHS	6,743	6	0.09	0.01	507	0.12	203		ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 13.2	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide; veterinary medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,337	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.81	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.13E-07	atm-m^3/mol		
Water Solubility	40	mg/L		
% water PBT profiler				

Contaminant	Diazinon oxygen analog
Substance Key:	79205
Contaminant ID (CASRN):	

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1
Scores based on parent		Scores based on parent	

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1] **See Diazinon Parent**

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0002**	**mg/kg-d**		**Plasma ChE inhibition**	**Reference Dose (for parent)**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.4	µg/L			**Based on data for Parent Diazinon**
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data- FOR DIAZINON PARENT										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	**(Data for parent)**
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites/Samples**	**# with Detects**	**% PWSs/Sites/Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
PDP	283	1	0.4	0.04	0.04			ug/L	Pesticide Data Program (USDA) 2001
PDP	664	3	0.5	0.015	0.037			ug/L	Pesticide Data Program (USDA) 2002

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Analog of the pesticide diazinon

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Dibromoacetonitrile (DBAN)
Substance Key:	14629
Contaminant ID (CASRN):	3252435

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5		10	7

Incomplete data for scoring

3-model Categorical Prediction

HEALTH EFFECTS DATA[1]

NC HRL/DBP ICR 90%: 14.7

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**6.5**	**mg/kg-d**			**Supplemental Data**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		
NTP Carcinogen Studies	Some evidence - Clear evidence		2008		National Toxicology Program TR-544
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	45.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR			**48.6**	**1.61**	**24**	**1.2**	**3.1**			
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# Samples	# with Detects	% Samples w/ Detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/DBP ICR 90%)	Non-cancer: 14.7	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Disinfection By-Product					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation. Note: may hydrolyze
K_{OC}, Organic Carbon Partition Coefficient	13	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.06E-07	atm-m^3/mol		
Water Solubility	9,600	mg/L		
% water PBT profiler	48			

Contaminant	Dibromomethane
Substance Key:	2611
Contaminant ID (CASRN):	74953

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 10.9

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.01**	**mg/kg-d**		**increased carboxyhemoglobin**	**Reference Dose; USEPA, 1987; Basis NOAEL, UF = 1000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	11.9	mg/kg-d	1988	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - dehydrogenases; plasma urea and mild histological changes	Lowest Observed Adverse Effect Level; 28-day oral study in rat; BECTA6 Bulletin of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) V.1- 1966- Volume(issue)/page/year 41,515,1988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	16,549	60	0.363	0.1	21.1	**1.4**	6.4	21.1	ug/L	
NCOD Round 2 finished water	23,006	108	**0.469**	0.00055	16.2	1.1	5.3	16	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,308	5	0.116	0.01	0.2	0.1	0.1	0.2	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	24,935	lbs/yr	4	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,883	16	0.13	0.55	14	0.895	2.45	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
Krasner, et al.	12	1	8.33			ND		ug/L	Finished drinking water monitoring; Krasner, et al, 2006. *Env. Sci. Technol.* , 40, pp 7175-7185 (and related documentation).

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 10.9	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Organic synthesis; solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	23.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000822	atm-m^3/mol		
Water Solubility	11,900	mg/L		
% water PBT profiler	36			

Contaminant	Dibutyltin dichloride
Substance Key:	9364
Contaminant ID (CASRN):	683181

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	5	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL-Int	**0.005**	**mg/kg-d**	**2003**	**depressed humoral response against SRBC**	**Minimal Risk Level; Int**
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.5	mg/kg-d	1977	Immunological Including Allergic - decrease in humoral immune response	Lowest Observed Adverse Effect Level; 4-week oral study in rat; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 42,213,1977
Supplemental LOAEL	5	mg/kg-d		Complete resorption of implanted embryos, increased incidence of post implantation loss, cleft jaw, decreased weight gain.	Supplemental Data; Toxicol letters 58:347-356, 1991
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	0.05	mg/kg		Details of toxic effects not reported other than lethal dose value	85JCAE "Prehled Prumyslove Toxikologie; Organicke Latky," Marhold, J., Prague, Czechoslovakia, Avicenum, 1986 Volume(issue)/page/year -,1248,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Pesticide; polymer intermediate; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	1.56	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	92	mg/L		
% water PBT profiler				

Contaminant	Dibutyltin oxide
Substance Key:	9781
Contaminant ID (CASRN):	818086

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	5	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.171**	**mg/kg-d**	**1977**	**Behavioral - alteration of classical conditioning, Blood - normocytic anemia, Blood - changes in erythrocyte (RBC) count**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 42(4),14,1977, 26-week, rodent-rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	44.9	mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.4	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Industrial Chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Dichloran
Substance Key:	4022
Contaminant ID (CASRN):	99309

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	6	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 97.2

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.025**	**mg/kg-d**		**Increased alkaline phosphatase & cholesterol, increased liver weights, hepatocyte hypertrophy, vacuolar alterations of the brain and spinal cord, prostate atrophy, degeneration of the seminiferous tubules, & hypospermia in the epididymides**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	74.8	mg/kg-d	1968	Liver - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 2 year dog study; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 12,314,1968
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,450	mg/kg		Details of toxic effects not reported other than lethal dose value	rodent-guinea pig; PCOC Pesticide Chemicals Official Compendium, Association of the American Pesticide Control Officials, Inc., 1966. (Topeka, KS) Volume(issue)/page/year -,343,1966
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**188,683**	**lbs/yr**	**2**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11		0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

OPP Estimated Environmental Concentration	Surface water chronic: 1.8 ug/L		Ground water chronic: 1.3 ug/L		
HRL Ratios (HRL/SW Chronic EEC)	Non-cancer: 97.2		Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Fungicide; in dyes (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	6.3	mg/L		
% water PBT profiler	12			

Contaminant:	Dichloroacetaldehyde
Substance Key:	2854
Contaminant ID (CASRN):	79027

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	6

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
DSSTOX Carcinogen Classification	M				DSSTOX; M = Medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al. and related documentation	**12**	**12**	**100**	**ND**	**14**	**1**		**ug/L**	**Finished drinking water monitoring; Krasner, et al, 2006. Env. Sci. Technol., 40, pp 7175-7185 (and related documentation).**

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	4.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.27	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.40E-06	atm-m^3/mol		
Water Solubility	140,000	mg/L		
% water PBT profiler	52			

Contaminant:	Dichloroacetonitrile (DCAN)
Substance Key:	14263
Contaminant ID (CASRN):	3018120

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR			**70.1**	**2.59**	**24.6**	**1.97**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al. and related documentation	12	12	100	ND	12	1		ug/L	Finished drinking water monitoring; Krasner, et al, 2006. Env. Sci. Technol., 40, pp 7175-7185 (and related documentation).

HRL Ratios (No HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades slowly with acclimation. Note: may hydrolyze
K_{OC}, Organic Carbon Partition Coefficient	13	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.29	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.79E-06	atm-m^3/mol		
Water Solubility	33,500	mg/L		
% water PBT profiler	51			

Contaminant:	Dichloroiodomethane
Substance Key:	8286
Contaminant ID (CASRN):	594047

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	5

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
DSSTOX Carcinogen Classification	M				DSSTOX; M = Medium probability of being carcinogenic
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Krasner, et al., (and related documentation)	**12**	**12**	**100**		**11**	**0.3**		**ug/L**	**Finished drinking water monitoring; Krasner, et al, 2006. Env. Sci. Technol., 40, pp 7175-7185 (and related documentation).**
HRL Ratios (No HRL)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Disinfection By-Product					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	33			

Contaminant	Dichlorvos
Substance Key:	2444
Contaminant ID (CASRN):	62737

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.0005	mg/kg-d	1993	Cholinesterase inhibition	Reference Dose, AMVAC Chemical Corporation, 1990, NOAEL, dog, UF=100; Basis NOAEL = 0.05 mg/kg-d
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0005	mg/kg-d	1990	Plasma and RBC ChE inhibition; blood	Reference Dose, AMVAC Chemical Corporation, 1990, NOAEL/LOAEL, dog, UF=100
ATSDR (ITER), MRL	0.0005	mg/kg-d	1997	Neurol.	Minimal Risk Level; UF = 100
JMPR, maximum ADI	0.004	mg/kg-d	1993		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.625	mg/kg-d		Brain and Coverings - other degenerative changes, Kidney, Ureter, Bladder - urine volume increased, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; 90-day dog study; NYZZA3 Nippon Yakuzaishikai Zasshi. Journal of the Japan Pharmaceutical Association. (Nippon Yakuznishikai, 2-12-15 Shibuya, Shibuya-ku, Tokyo 150, Japan) V.1- 1949- Volume(issue)/page/year 26,739,1974
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.01**	**mg/L**			**IRIS**
RAISHE Slope Factor	0.29	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.41	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1989	GI, pancreas, leukemia	NTP, 1986
IARC Carcinogen Classification	2B		1991		Vol. 53
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, RAISHE, OEHHA, IARC, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.1	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water			**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	**National Aggregate**
NREC ambient ground water			0	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	264	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PPMP		0	0	0	0	0	0	ug/L	Pesticide Pilot Montoring Program (USGS/EPA) 9002(GC/MS); Ambient
PPMP		0	0	0	0	0	0	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)9002(GC/MS); Finished
	# PWSs/Sites/Samples	**# with Detects**	**% PWSs/Sites/Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**Units for Mag data**	**Notes**
CAL DHS	107		0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide; veterinary medicine (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	<1-3.5 days	length of time	DF	DF = Degrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	40.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.75E-07	atm-m^3/mol		
Water Solubility	8,000	mg/L		
% water PBT profiler				

Contaminant	Dicofol
Substance Key:	5106
Contaminant ID (CASRN):	115322

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	10	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 16.8

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0012**	**mg/kg-d**		**Adrenal effect: Inhibition of adrenal cortical trophic hormone (ACTH), stimulated release of cortisol**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.002	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	22.5	mg/kg-d	2001	Related to Chronic Data - death	Lowest Observed Adverse Effect Level; one year dog study; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1342,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	8.4	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**786,805**	**lbs/yr**	**36**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	33	lbs/yr	2	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	21		0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

OPP Estimated Environmental Concentration	Surface water chronic: 0.5 ug/L	Ground water chronic: 0.069 ug/L	
HRL Ratios (HRL/SW Chronic EEC)	Non-cancer: 16.8	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide; (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	10,500	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.02	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.42E-07	atm-m^3/mol		
Water Solubility	0.8	mg/L		
% water PBT profiler	3			

Contaminant	Dicyclopentadiene
Substance Key:	2762
Contaminant ID (CASRN):	77736

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	1	9	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.03**	**mg/kg-d**	**1987**	**None observed**	**Reference Dose, U.S. EPA, NOEL, rat, UF=1,000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	100	mg/kg-d		reproductive/developmental	No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1	mg/kg-d	1986	Behavioral - alteration of classical conditioning, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - multiple enzyme effects	Lowest Observed Adverse Effect Level; 26 week rat study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 51(2),77,1986
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	190	mg/kg		Details of toxic effects not reported other than lethal dose value	mouse study; 40QBA3 "Proceedings of the International Congress on Toxicology, Toxicology as a Predictive Science, 1st, Toronto, 1977," Plaa, G.L., and W.A. Duncan, eds., New York, Academic Press, Inc., 1978 Volume(issue)/page/year -,448,1978
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	5,234	lbs/yr	4	States	2004	
TRI Release - total	**392,668**	**lbs/yr**	**22**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			

Use	Chemical intermediate; in flame retardants; animal repellant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,800	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.26E-02	atm-m^3/mol		
Water Solubility	51.9	mg/L		
% water PBT profiler	75			

Contaminant	Dieldrin
Substance Key:	2415
Contaminant ID (CASRN):	60571

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8	3	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/NCOD R2 90%: 0.8
CAR HRL/NCOD R2 90%: 4.5

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.00005	mg/kg-d	1988	Irritability, tremors, occasional convulsions. Increased absolute & relative liver weights. Liver parenchyma cell changes including focal proliferation & focal hyperplasia	Reference Dose; Walker et al., 1969, Basis NOAEL = 0.005 mg/kg-d, rat, UF=100
EPA HA RfD	0.00005	mg/kg-d			Reference Dose
RAISHE RfD	0.00005	mg/kg-d		liver	Reference Dose, Walker et al., 1969, Basis NOAEL/LOAEL, rat, UF=100
ATSDR (ITER), MRL	0.00005	mg/kg-d	2000	liver	Minimal Risk Level, Walker et al., 1969, Basis NOAEL = 0.005 mg/kg-d, rat, UF=100
JMPR, maximum ADI	0.0001	mg/kg-d	1994		Acceptable Daily Intake; combined total Aldrin + Dieldrin; see also Aldrin
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.0001	mg/kg-d	2000		Tolerable Daily Intake; Fitzhugh et al., 1964; Treon & Cleaveland, 1955, Basis LOAEL = 0.025 mg/kg-d; UF = 250; rat and dog study
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.0083	mg/kg-d	1973	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Immunological Including Allergic - decrease in humoral immune response, Biochemical - Metabolism (Intermediary) - other proteins	Lowest Observed Adverse Effect Level; 13 week rabbit study; BECTA6 Bulletin of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) V.1- 1966- Volume(issue)/page/year 10,42,1973
Supplemental LOAEL		mg/kg-d		liver	Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0002**	**mg/L**			**IRIS**
RAISHE Slope Factor	16	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	16	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	3		1987		Vol. 5, Suppl 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; RAISHE; OEHHA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL	0.002				Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	µg/L			
Health Reference Level (HRL)[2] cancer	0.002	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**11,843**	**21**	**0.177**	**0.02**	**4.4**	**0.5**	**4.4**	**4.4**	**ug/L**	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	7,100	205	2.89	0.001	5.60	0.0097	0.034	2.48	ug/L	
NREC ambient surface water	85	4	4.70			0.180			ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PPMP		1	0.3					ug/L	Pesticide Pilot Montoring Program (USGS/EPA) Ambient
PPMP		0	0					ug/L	Pesticide Pilot Montoring Program (USGS/EPA) Finished
	# Sites	**# with Detects**	**% Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**Units for Mag data**	**Notes**
CAL DHS	5,212	4	0.08	0.01	7	0.0225	4.91	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R2 90%)	Non-cancer: 0.8	Cancer: 4.5	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Restricted insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	DST	DST = Degrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	10,600	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.00E-05	atm-m^3/mol		
Water Solubility	0.25	mg/L		
% water PBT profiler				

Contaminant	Diethanolamine
Substance Key:	4937
Contaminant ID (CASRN):	111422

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	9

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**20**	**mg/kg-d**		**changes in liver and kidney weights**	**Supplemental Data, NTP information from HSDB, NOAEL**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		2000		Vol. 77
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	55,403	lbs/yr	14	States	2004	
TRI Release - total	**1,396,761**	**lbs/yr**	**29**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			

Use	Chemical intermediate; in cutting oils and PPCPs; in lubricant production (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF/BFA/BSA	BF = Biodegrades fast/BFA = Biodegrades fast with acclimation/BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	4	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.43	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	34			

Contaminant	Diethyl sulfate
Substance Key:	2468
Contaminant ID (CASRN):	64675

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	6	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**647**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB214-270**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2A		1999		Vol. 54, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**10,644**	**lbs/yr**	**6**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>1M-10M	lbs/yr	2002

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Chemical intermediate (HSDB)
$T_{1/2}$, Half life	1.7 hours	length of time	DF	DF = Degrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.14	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	7,000	mg/L		
% water PBT profiler				

Contaminant	Diethylbenzene
Substance Key:	28613
Contaminant ID (CASRN):	25340174

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.643**	**mg/kg-d**	**1975**	**Vascular - regional or general arteriolar or venous dilation, Liver - other changes, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol)**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 40(6),90,1975; 6-wk rabbit study**
Supplemental LOAEL		mg/kg			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,000	mg/kg	1975	Details of toxic effects not reported other than lethal dose value	rabbit study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 40(6),90,1975
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.50	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year					
CUSIUR Production Data	>10M - 50M	lbs/yr	1998					
	>10M - 50M	**lbs/yr**	**2002**					

Use	Industrial chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.07	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.021	atm-m^3/mol		
Water Solubility	31.9	mg/L		
% water PBT profiler	**14**			

Contaminant	Diethylene glycol
Substance Key:	4941
Contaminant ID (CASRN):	111466

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	7	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI	0.1	mg/kg-d			Acceptable Daily Intake; No Severity information available; scored on CTDJPN NOEL.
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**1,250**	**mg/kg-d**		**Maternal toxicity; increases in absolute and relative kidney weights**	**Supplemental Data; NTP study TER89001**
RTECS Lowest Oral Chronic LOAEL	375	mg/kg-d	1937	Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 7 week rat study; JAMAAP JAMA, Journal of the American Medical Association. (AMA, 535 N. Dearborn St., Chicago, IL 60610) V.1- 1883- Volume(issue)/page/year 109,1517,1937
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	2,300	mg/kg		Brain and Coverings - other degenerative changes, Liver - other changes, Kidney, Ureter, Bladder - other changes	Mouse study; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,145,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	8,750	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500M-1B	lbs/yr	1998			
	>500M-1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; humectant; antifreeze; in PPCPs (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.00E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**35**			

Contaminant	Diethylene glycol monobutyl ether
Substance Key:	5022
Contaminant ID (CASRN):	112345

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.01**	**mg/kg-d**		**hematological effects**	**Reference Dose, Hobson et al., 1987, NOAEL/ADJ, rat, UF=3,000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Former pesticide; chemical intermediate; industrial solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**10**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.56	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.45E-11	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Diethylenetriamine
Substance Key:	4935
Contaminant ID (CASRN):	111400

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**10**	**mg/kg-d**	**1972**	**Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 37(7),103,1972, LOAEL, 26 week rabbit study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,080	mg/kg		Behavioral - convulsions or effect on seizure threshold	AMIHAB AMA Archives of Industrial Health. (Chicago, IL) V.11-21, 1955-60. For publisher information, see AEHLAU. Volume(issue)/page/year 17,129,1958
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	23	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									u	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>50M-100M	lbs/yr	1998						
	>100M-500M	**lbs/yr**	**2002**						
Use	Chemical intermediate; industrial solvent; chelating agent (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.13	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.15E-07	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Diethyltoluenediamine
Substance Key:	51017
Contaminant ID (CASRN):	68479981

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**472**	**mg/kg**		**Sense Organs and Special Senses (Eye) - lacrimation, Behavioral - somnolence (general depressed activity), Musculoskeletal - other changes**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0537598, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Industrial Chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**20**			

Contaminant	Difenzoquat methyl sulfate
Substance Key:	34821
Contaminant ID (CASRN):	43222486

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.2**	**mg/kg-d**		**Decreased body weight gain**	**Reference Dose**
EPA IRIS (ITER) RfD	0.08	mg/kg-d	1988	Decreased body weight	Reference Dose, American Cyanamide Co., 1975, Basis NOEL=25 mg/kg-d, rat, UF=300
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.08	mg/kg-d		Decreased weight	Reference Dose, American Cyanamide Co., 1975, Basis NOEL, LEL, rat, UF=300
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	25	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	40	mg/kg-d	1983	Blood - pigmented or nucleated red blood cells, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Liver - other changes	Lowest Observed Adverse Effect Level; 26 week rat study;KHZDAN Khigiena i Zdraveopazvane. Hygiene and Sanitation. (Hemus, Blvd. Russki 6, Sofia, Bulgaria) V.9- 1966- Volume(issue)/page/year 29(6),42,1983
Supplemental LOAEL	40	mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	206	mg/kg		Details of toxic effects not reported other than lethal dose value	rat study; KHZDAN Khigiena i Zdraveopazvane. Hygiene and Sanitation. (Hemus, Blvd. Russki 6, Sofia, Bulgaria) V.9- 1966- Volume(issue)/page/year 29(6),42,1983
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**346,308**	**lbs/yr**	**11**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (ChemIDPlus)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	118,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.02	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	5,553	mg/L		
% water PBT profiler				

Contaminant	Diglycidyl resorcinol ether
Substance Key:	4212
Contaminant ID (CASRN):	101906

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	143	mg/kg-d	1986	Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 13 week rat study; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-257,1986
Supplemental LOAEL	12	mg/kg-d		Decreased survival in males. (Cancer results positive in both sexes mice and rats).	Supplemental Data; NTP Rep # 257
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**1.7**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		Vol. 36, Suppl. 7; Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	334	µg/L			
Health Reference Level (HRL)[2] cancer	0.021	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**1**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	In resins; rubber additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.23	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	38			

Contaminant	Dimethyl hydrogen phosphite
Substance Key:	9953
Contaminant ID (CASRN):	868859

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**50**	**mg/kg-d**		**noneoplastic lesions of the lungs (rats) - Testicular atrophy in male mice at a dose of 100 mg/kg Clear evidence of cancer in male rats, equivocal evidence in female rats and no evidence in mice**	**Supplemental Data, NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-287,1985**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 48, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	117	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10K-500K	lbs/yr	1998
	>1M-10M	**lbs/yr**	**2002**

Use	In lubricants; flame retardant; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**19 days**	**length of time**	**DS**	**DS = Degrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	>100,000	mg/L		
% water PBT profiler	**46**			

Contaminant	Dimethyl laurylamine
Substance Key:	5006
Contaminant ID (CASRN):	112185

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**740**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**Lewis, R.J. Saxs Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 1322**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>50M-100M	**lbs/yr**	**2002**

Use	Chemical intermediate; corrosion inhibitor (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	21,700	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.4	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0049	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**11**			

Contaminant	Dimethyl sulfate
Substance Key:	2767
Contaminant ID (CASRN):	77781

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	8	5

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**140**	**mg/kg**	**1979**	**Details of toxic effects not reported other than lethal dose value**	**GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 23(3),28,1979**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1988		
IARC Carcinogen Classification	2A		1999		Vol. 4, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA, IARC, CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**10,221**	**lbs/yr**	**11**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			

Use	Chemical intermediate; former war gas (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	1.2 hours	length of time	DF	DF = Degrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	24.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.01E-06	atm-m^3/mol		
Water Solubility	28,000	mg/L		
% water PBT profiler				

Contaminant	Dimethyl terephthalate
Substance Key:	5339
Contaminant ID (CASRN):	120616

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**	**1985**	**Chronic kidney inflammation**	**Reference Dose, NCI, 1979, Basis LOAEL = 125 mg/kg-d, rat, UF=1,000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.1	mg/kg-d		kidney; chronic inflammation	Reference Dose, NCI, 1979 , LOAEL, rat, UF=1,000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	588	mg/kg-d	1973	Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 14 week rat study; AIHAAP American Industrial Hygiene Association Journal. (AIHA, 475 Wolf Ledges Pkwy., Akron, OH 44311) V.19- 1958- Volume(issue)/page/year 34,455,1973
Supplemental LOAEL	125	mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**36.3**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000134	atm-m^3/mol		
Water Solubility	19	mg/L		
% water PBT profiler				

Contaminant	Dimethylamine
Substance Key:	5570
Contaminant ID (CASRN):	124403

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.347**	**mg/kg-d**	**1967**	**Behavioral - alteration of classical conditioning, Liver - changes in liver weight, Immunological Including Allergic - decrease in cellular immune response**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 32(6),12,1967, 35 week rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	240	mg/kg		Behavioral - excitement, Behavioral - muscle weakness, Gastrointestinal - ulceration or bleeding from stomach	rabbit and guinea pig studies; HYSAAV Hygiene and Sanitation (USSR). English translation of GISAAA. (Springfield, VA) 1964-71. Discontinued. Volume(issue)/page/year 32(6),329,1967
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.81	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	25,286	lbs/yr	7	States	2004	
TRI Release - total	**618,880**	**lbs/yr**	**26**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	lbs/yr	2002

Use	Rubber additive; chemical intermediate; fuel additive; photographic chemical (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	435	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	49			

Contaminant	Dimethyldichlorosilane
Substance Key:	2681
Contaminant ID (CASRN):	75785

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	9	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**800**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**Clayton, G. D. and F. E. Clayton (eds.). Pattys Industrial Hygiene and Toxicology: Volume 2A, 2B, 2C: Toxicology. 3rd ed. New York: John Wiley Sons, 1981-1982., p. 2398**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>500M-1B	lbs/yr	1998						
	>500M-1B	**lbs/yr**	**2002**						
Use	Chemical intermediate; laboratory chemical (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.24	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.019	atm-m^3/mol		
Water Solubility	1,120	mg/L		
% water PBT profiler	**42**			

Contaminant	Dimethyltin dichloride
Substance Key:	9560
Contaminant ID (CASRN):	753731

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	6	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	73.9	mg/kg	1973	Details of toxic effects not reported other than lethal dose value	rodent-rat; TRIPA7 Tin Research Institute, Publication. (Middlesex, UK) 1934-76. For publisher information, see IRIPDP. Volume(issue)/page/year -,1,1973
Supplemental LD50	**14**	**mg/kg**	**1986**	**Neurological damamge to the brain**	**Aldridge et al, 1986**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	In plastics, food packaging, plastics, pesticides and paints (organotins)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.06	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	20,000	mg/L		
% water PBT profiler				

Contaminant	Dinitrotoluene
Substance Key:	28581
Contaminant ID (CASRN):	25321146

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	2	4

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	0.002	mg/kg-d		Weakness, ataxia, tremors, and neurotoxicity	Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.025	mg/kg-d	1977	Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other esterases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other oxidoreductases	Lowest Observed Adverse Effect Level; 26 week rat study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 42(10),17,1977
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.005**	**mg/L**			**EPAHA**
RAISHE Slope Factor	0.68	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		19990	Liver, mammary gland	
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			EPA, RAISHE
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	µg/L			
Health Reference Level (HRL)[2] cancer	0.05	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	13	lbs/yr	1	States	2004	
TRI Release - total	**6,802**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1B	lbs/yr	1998
	>1B	lbs/yr	2002

Use	Chemical intermediate; plasticizer (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	372	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.18	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.96E-07	atm-m^3/mol		
Water Solubility	270	mg/L		
% water PBT profiler	21			

Contaminant	Diphenylamine
Substance Key:	5436
Contaminant ID (CASRN):	122394

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	8

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.03**	**mg/kg-d**		**Alterations in clinical chemistry parameters. Increased absolute & relative kidney, liver & spleen weights**	**Reference Dose**
EPA IRIS (ITER) RfD	0.025	mg/kg-d			Reference Dose, Thomas et al., 1967, Basis NOEL=2.5 mg/kg-d, dog, UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.025	mg/kg-d		Decreased body weight gain, increased liver and kidney weights	Reference Dose, Thomas et al., 1967, NOEL/LEL, dog, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.08	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	2.5	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.833	mg/kg-d	1999	Gastrointestinal - alteration in gastric secretion, Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis), Kidney, Ureter, Bladder - proteinuria	Lowest Observed Adverse Effect Level; 30 day rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	300	mg/kg		Details of toxic effects not reported other than lethal dose value	guinea pig study; FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C112,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	97	lbs/yr	3	States	2004	
TRI Release - total	**414,131**	**lbs/yr**	**15**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>10M-50M	lbs/yr	2002

Use	Fungicide/herbicide; polymer stabilizer; rubber additive; topical veterinary agent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1,887	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.40E-06	atm-m^3/mol		
Water Solubility	53	mg/L		
% water PBT profiler				

Contaminant	Dipropylamine
Substance Key:	6158
Contaminant ID (CASRN):	142847

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**5**	**mg/kg-d**	**1970**	**Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - catalases**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 35(4),103,1970, 26 week rat and rabbit study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	300	mg/kg		Behavioral - changes in motor activity (specific assay), Behavioral - muscle weakness	rat study; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0544865
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	11.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>10M-50M	lbs/yr	1998						
	>10M-50M	**lbs/yr**	**2002**						
Use	Chemical intermediate (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	190	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.67	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	35,100	mg/L		
% water PBT profiler	**37**			

Contaminant	Dipropylene glycol
Substance Key:	28536
Contaminant ID (CASRN):	25265718

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	6	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**6,200**	**mg/kg-d**		**Kidney lesions**	**Supplemental Data, SIDS Summary**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	14.8	mL/kg			Kirk-Othmer Encyclopedia of Chemical Technology. 3rd ed., Volumes 1-26. New York, NY: John Wiley and Sons, 1978-1984., p. 11 (1980) 936
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	14,850	mg/kg		Details of toxic effects not reported other than lethal dose value	rodent-rat; 34ZIAG "Toxicology of Drugs and Chemicals," Deichmann, W.B., New York, Academic Press, Inc., 1969 Volume(issue)/page/year -,731,1969
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	43,400	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Pesticide; antifreeze; in PPCPs; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.64	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.60E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Diquat
Substance Key:	13896
Contaminant ID (CASRN):	2764729

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/CAL DHS 90%: 0.3

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.005**	**mg/kg-d**		**Lens opacities cataracts decreased organ weights epidymus adenals**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.002	mg/kg-d			Acceptable Daily Intake; as diquat ion
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	30	mg/kg		Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea, Nutritional and Gross Metabolic - weight loss or decreased weight gain	BJIMAG British Journal of Industrial Medicine. (British Medical Journal, Box 560B, Kennebunkport, ME 04046) V.1- 1944- Volume(issue)/page/year 27,51,1970
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			
CADW MAC	0.07	mg/L			
WHOWQ	10	µg/L			Provisional Guideline value

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**266,858**	**lbs/yr**	**28**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	4,867	9	0.18	0.08	549	4.9	115	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

OPP Estimated Environmental Concentration		Surface water chronic: 0.4 ug/L				Ground water chronic: 0.006 ug/L			
HRL Ratios (HRL/CAL DHS 90%)		Non-cancer: 0.3				Cancer:			

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (for diquat dibromide, CASRN 85-00-7)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	2,000	L/kg		For diquat dibromide
log K_{OW}, Octanol Water Partition Coeff.	-4.6	unitless		For diquat dibromide
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.40E-13	atm-m^3/mol		For diquat dibromide
Water Solubility	708,000	mg/L		For diquat dibromide
% water PBT profiler	20			

Contaminant	Disodium iminodiacetate
Substance Key:	10140
Contaminant ID (CASRN):	928723

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	9	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**8,070**	**mg/kg**	**1972**	**Details of toxic effects not reported other than lethal dose value**	**28ZPAK "Sbornik Vysledku Toxixologickeho Vysetreni Latek A Pripravku," Marhold, J.V., Institut Pro Vychovu Vedoucicn Pracovniku Chemickeho Prumyclu Praha, Czechoslovakia, 1972 Volume(issue)/page/year -,128,1972, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>100M-500M	lbs/yr	1998						
	>500M-1B	**lbs/yr**	**2002**						
Use	Industrial Chemical (EPA/SRS)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	Dodecylbenzenesulfonic acid
Substance Key:	29930
Contaminant ID (CASRN):	27176870

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	8	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**650**	**mg/kg**	**1974**	**Details of toxic effects not reported other than lethal dose value**	**ARTODN Archives of Toxicology. (Springer-Verlag, Heidelberger Pl. 3, D-1000 Berlin 33, Fed. Rep. Ger.) V.32- 1974- Volume(issue)/page/year 32,245,1974, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Laboratory chemical; fungicide stabilizer; in electronics cleaners (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.27E-08	atm-m^3/mol		
Water Solubility	0.703	mg/L		
% water PBT profiler	**17**			

Contaminant	Dodine
Substance Key:	13332
Contaminant ID (CASRN):	2439103

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.02**	**mg/kg-d**		**Body weight loss**	**Reference Dose, American Cyanamid, 1958**
EPA IRIS (ITER) RfD	0.004	mg/kg-d	1987	Thyroid	Reference Dose, American Cyanamid, 1958, Basis NOEL = 1.25 mg/kg-d, dog, UF=300
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.004	mg/kg-d			Reference Dose; American Cyanamid, 1958, UF=300, dog
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.1	mg/kg-d	2000		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	1.25	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	48	mg/kg-d	1961	Behavioral - food intake (animal), Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 2 year rat study; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 3,127,1961
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	176	mg/kg		Details of toxic effects not reported other than lethal dose value	rodent-guinea pig; 85GMAT "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982 Volume(issue)/page/year -,64,1982
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**151,538**	**lbs/yr**	**28**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Fungicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	15,500	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.02E-19	atm-m^3/mol		
Water Solubility	630	mg/L		
% water PBT profiler	31			

Contaminant	Endosulfan
Substance Key:	5104
Contaminant ID (CASRN):	115297

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 28

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.006**	**mg/kg-d**		**Reduced body weight gain, enlarged kidneys, increased incidences of marked progressive glomerulonephrosis, & blood vessel aneurysms**	**Reference Dose**
EPA IRIS (ITER) RfD	0.006	mg/kg-d	1994	red. body weight gain, glomerular nephrosis	Reference Dose; Basis NOAEL = 0.7 female and 0.6 male mg/kg-d, Hoechst, 1989a; UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.006	mg/kg-d		red body weight, increased marked progressive glomrulonephrosis	Reference Dose, Hoechst Celanese Corp. 1989, NOAEL/LOAEL, rat, UF=100
ATSDR (ITER), MRL	0.002	mg/kg-d	2000	hepatic; liver	Minimal Risk Level, Hoechst, 1989c, Basis NOAEL = 0.18 mg/kg-d, dog, UF=100
JMPR, maximum ADI	0.006	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	42	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,601,195**	**lbs/yr**	**44**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data									
OPP Estimated Environmental Concentration		Surface water chronic: 1.5 ug/L				Ground water chronic: 0.012 ug/L			
HRL Ratios (HRL/SW Chronic EEC)		Non-cancer: 28				Cancer:			

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	22,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.83	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.51E-05	atm-m^3/mol		
Water Solubility	0.45	mg/L		
% water PBT profiler	5			

Contaminant	EPTC
Substance Key:	9581
Contaminant ID (CASRN):	759944

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.025**	**mg/kg-d**	**1987**	**Degenerative cardiomyopathy**	**Reference Dose, PPG Industries, 1986a, Basis NOEL = 2.5 mg/kg-d, rat, UF = 100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.025	mg/kg-d		Degenerative cardiomyopathy	Reference Dose, PPG Industries, 1986, NOEL/LEL, rat, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	2.5	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	112	mg/kg	1971	Details of toxic effects not reported other than lethal dose value	mammal- cat; HYSAAV Hygiene and Sanitation (USSR). English translation of GISAAA. (Springfield, VA) 1964-71. Discontinued. Volume(issue)/page/year 36(1-3),196,1971
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,621**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,118	406	5.7	Not Detected	40	0.01	0.086	1.5	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	8,791,984	lbs/yr	42	States	1997	
TRI Release - surface water	12	lbs/yr	3	States	2004	
TRI Release - total	1,204	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	115							ug/L	Pesticide Data Program (USDA) 2002
PPMP	12		5.3		0.03			ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2001(GC/MS)
CAL DHS	2,243		0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	258	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.21	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.59E-05	atm-m^3/mol		
Water Solubility	375	mg/L		
% water PBT profiler	17			

Contaminant	Esfenvalerate
Substance Key:	42403
Contaminant ID (CASRN):	66230044

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 26.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.02**	**mg/kg-d**		**Maternal toxicity - abnormal gait and mobility**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	325	mg/kg		Details of toxic effects not reported other than lethal dose value	rodent-rat; FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C287,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**228,885**	**lbs/yr**	**47**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	
Supplemental Water Data						
OPP Estimated Environmental Concentration		Surface water chronic: 5.3 ug/L				Ground water chronic: 0.009 ug/L
HRL Ratios (HRL/SW Chronic EEC)		Non-cancer: 26.4				Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide; medication (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	16.3 days	length of time	DFA	DFA = Degrades slow with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	100,000-398,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	<1	mg/L		
% water PBT profiler	2			

Contaminant	Estragole
Substance Key:	6041
Contaminant ID (CASRN):	140670

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	3	5	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	**10**	**mg/kg-d**		**decreased body weight, increased liver weight increased liver enzymes, hematoloficla effects**	**Supplemental Data, RfD eq, Smith et al 2002, Adbo et al abstract**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,230	mg/kg		Details of toxic effects not reported other than lethal dose value	rodent-rat; FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 14,603,1976
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Flavoring agent; in PPCPs (HSDB)			

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	178	mg/L		
% water PBT profiler	**12**			

Contaminant	Ethanol
Substance Key:	2462
Contaminant ID (CASRN):	64175

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1.43**	**mg/kg-d**	**1976**	**Behavioral - changes in motor activity (specific assay), Behavioral - ataxia, Behavioral - antipsychotic**	**Lowest Observed Adverse Effect Level, JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1- 1909/10- Volume(issue)/page/year 197,488,1976; human study**
Supplemental LOAEL	100	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,450	mg/kg		Details of toxic effects not reported other than lethal dose value	Rodent-mouse; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 32(3),31,1967
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3.34	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	2		0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Pesticide; beverage/food additive; medication; solvent (HSDB); gasoline additive

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.31	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.00E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**41**			

Contaminant	Ethephon
Substance Key:	25550
Contaminant ID (CASRN):	16672870

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SW Chronic EEC: 18.8

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.018**	**mg/kg-d**		**Diarrhea, urinary & bowel movements urgency, stomach cramps**	**Reference Dose**
EPA IRIS (ITER) RfD	0.005	mg/kg-d	1988	Plasma cholinesterase inhibition	Reference Dose, Union Carbide, 1977a, Basis LEL, human, UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.005	mg/kg-d		blood	Reference Dose; Union Carbide, 1977, Basis LEL, human, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.05	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1,250	mg/kg-d	1983	Brain and Coverings - recordings from specific areas of CNS, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 8 week rat study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 48(8),79,1983
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	126	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total	**5,407,986**	**lbs/yr**	**32**	**States**	**1997**					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data										
OPP Estimated Environmental Concentration		Surface water chronic: 6.7 ug/L				Ground water chronic: 0.67 ug/L				
HRL Ratios (HRL/SW Chronic EEC)	Non-cancer: 18.8				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data		lbs/yr	1998							
		lbs/yr	2002							
Use	Plant growth regulator (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)						
K_{OC}, Organic Carbon Partition Coefficient	3.57	L/kg								
log K_{OW}, Octanol Water Partition Coeff.	0.05	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	5.70E-12	atm-m^3/mol								
Water Solubility	1,000,000	mg/L								
% water PBT profiler	46									

Contaminant:	Ethion
Substance Key:	7949
Contaminant ID (CASRN):	563122

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	6	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 0.53

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0005**	**mg/kg-d**		**Plasma, RBC & brain ChE inhibition**	**Reference Dose; Basis = NOAEL 0.05 mg/kg-d; UF = 100.**
EPA IRIS (ITER) RfD	0.0005	mg/kg-d	1989	Decreased body weight	Reference Dose; Basis = NOEL 0.05 mg/kg-d
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0005	mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.0004	mg/kg-d	2000	Brain acetylcholinesterase inhibition	Minimal Risk Level; Basis = NOAEL 0.06 mg/kg-d
JMPR, maximum ADI	0.002	mg/kg-d	1990		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.5	mg/kg-d		Blood - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; TOXID9 Toxicologist. (Soc. of Toxicology, Inc., 475 Wolf Ledge Parkway, Akron, OH 44311) V.1- 1981- Volume(issue)/page/year 8,173,1988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	13	mg/kg		Details of toxic effects not reported other than lethal dose value	PHJOAV Pharmaceutical Journal. (Pharmaceutical Soc. of Great Britain, 1 Lambeth High St., London, SE1 7JN, UK) V.131- 1933- Volume(issue)/page/year 185,361,1960
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**504,535**	**lbs/yr**	**2**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units	Notes
PPMP ambient water		0	0		Not Detected		Not Detected	ug/L	Pesticide Pilot Montoring Program (USGS/EPA)
PPMP finished water		0	0		Not Detected		Not Detected	ug/L	

OPP Estimated Environmental Concentration	Surface water chronic: 6.6 ug/L	Ground water chronic: 0 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 0.53	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	PBT; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	13,200	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.07	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.56E-07	atm-m^3/mol		
Water Solubility	2	mg/L		
% water PBT profiler	11			

Contaminant	Ethyl acetate
Substance Key:	6103
Contaminant ID (CASRN):	141786

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	9	8	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.9**	**mg/kg-d**	**1986**	**Mortality & body weight loss**	**Reference Dose, U.S. EPA, 1986, Basis NOEL=900 mg/kg-d, rat, UF=1,000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.9	mg/kg-d	1986	mortality and weight loss	Reference Dose; UF = 1,000; USEPA 1986; rat study
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	25	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	900	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	4,100	mg/kg		Behavioral - somnolence (general depressed activity), Behavioral - changes in motor activity (specific assay), Behavioral - coma	mouse study; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnay
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	6,300	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Cancelled pesticide; food additive; solvent; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**6.13**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.73	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000134	atm-m^3/mol		
Water Solubility	80,000	mg/L		
% water PBT profiler				

Contaminant	Ethyl acrylate
Substance Key:	6050
Contaminant ID (CASRN):	140885

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	9	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	71.4	mg/kg-d		Gastrointestinal - other changes	Lowest Observed Adverse Effect Level; 13 week rat study; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0540988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.048**	**$(mg/kg-d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		Vol. 39, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE; IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	167	µg/L			
Health Reference Level (HRL)[2] cancer	0.729	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	249	lbs/yr	4	States	2004	
TRI Release - total	**152,024**	**lbs/yr**	**24**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	lbs/yr	2002

Use	Polymer additive; former food and PPCP additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	11.9	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00034	atm-m^3/mol		
Water Solubility	15,000	mg/L		
% water PBT profiler				

Contaminant	Ethylamine
Substance Key:	2620
Contaminant ID (CASRN):	75047

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	6	8

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	71.4	mg/kg-d		Gastrointestinal - other changes	Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0540988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**400**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**Lewin, F.J. Saxs, Dangerous Properties of Industiral Materials. 9th ed. Volumes 1-3. New York, NY:Van Norstrand Reinhold, 1996., pl 1517, LD50, rat**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL/No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>10M-50M	lbs/yr	1998						
	>10M-50M	**lbs/yr**	**2002**						
Use	Chemical intermediate; solvent (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	20	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.13	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**48**			

Contaminant	Ethylene glycol monobutyl ether
Substance Key:	4970
Contaminant ID (CASRN):	111762

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.5**	**mg/kg-d**	**1999**	**Changes in blood mean corpuscular volume (MCV)**	**Reference Dose; NT, 1993, BMD, rat, UF=10**
EPA HA RfD		mg/kg-d			Refernce Dose
RAISHE RfD	0.5	mg/kg-d		changes in mean corpuscular volume	Reference Dose,NTP, 1993, BMD, mouse, rat, UF=10
ATSDR (ITER), MRL	0.07	mg/kg-d	1998		Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,500	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	In hydraulic fluids; industrial solvent; in PPCPs (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**1**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.83	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.60E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Ethylenediamine
Substance Key:	4594
Contaminant ID (CASRN):	107153

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	8	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.09**	**mg/kg-d**		**liver and kidney toxicity**	**Reference Dose; Hermansky et al 1999; Basis NOAEL, rat, UF=100**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	630	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Former pesticide; industrial solvent; in prep of dyes, synthetic waxes, resins, insecticides; veterinary medicine (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**24.7**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	-2.04	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.73E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Ethylenediaminetetraacetic acid
Substance Key:	2393
Contaminant ID (CASRN):	60004

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	1	6	7

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**250**	**mg/kg-d**	**1966**	**NOAEL without a LOAEL**	**Supplemental Data, Oser et al. 1966**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	30	mg/kg	1991	**Details of toxic effects not reported other than lethal dose value**	FCTOD7 Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982- Volume(issue)/page/year 29,845,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,750	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Former pesticide; antioxidant; chelating agent; in PPCPs; veterinary medicine (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	98	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-3.86	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.70E-16	atm-m^3/mol		
Water Solubility	1,000	mg/L		
% water PBT profiler	**34**			

Contaminant	Fenbutatin oxide
Substance Key:	22779
Contaminant ID (CASRN):	13356086

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.017**	**mg/kg-d**		**Decreased pup body weight gain**	**Reference Dose; May 31 2002 certified letter to the registrant**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	15	mg/kg-d	2001	Blood - changes in leukocyte (WBC) count	Lowest Observed Adverse Effect Level; 2-year oral study in rat; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1219,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,450	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	rodent, mouse; PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,364,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	119	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**265,275**	**lbs/yr**	**23**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	1,158	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Acaricide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.00E-09	atm-m^3/mol		
Water Solubility	0.0127	mg/L		
% water PBT profiler				

Contaminant	Ferbam
Substance Key:	24121
Contaminant ID (CASRN):	14484641

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	9	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.015**	**mg/kg-d**		**Developmental Neurotoxicity**	**Reference Dose, OPP RED Fact Sheet RfD for Thiram**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.003	mg/kg-d			Acceptable Daily Intake, Group ADI for Ferbam and Ziram
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	25	mg/kg-d	1956	Behavioral - convulsions or effect on seizure threshold, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 1-year oral study in dog; JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1-1909/10- Volume(issue)/page/year 118,174,1956
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	105	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**317,125**	**lbs/yr**	**24**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data			Notes
OPP Estimated Environmental Concentration	Surface water chronic: 0 ug/L		Ground water chronic: 0 ug/L

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Fungicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	300	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.6	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	130	mg/L		
% water PBT profiler				

Contaminant	Fluometuron
Substance Key:	12839
Contaminant ID (CASRN):	2164172

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	9	5

3-model Categorical Prediction
L?-L
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 19.25
CAR HRL/NAWQA AW 90%: 0.97

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.0055	mg/kg-d		Decreased body weight gain and discoloration in the spleen.	Reference Dose
EPA IRIS (ITER) RfD	0.013	mg/kg-d		No adverse effects. Decreased Potency Score by one integer	Reference Dose, NCI, 1980, NOAEL 12.5, rat, UF=1000
EPA HA RfD	0.01	mg/kg-d			Reference Dose
RAISHE RfD	0.013	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	100	mg/kg-d		Endocrine - changes in spleen weight, Blood - changes in spleen, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 90-day oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB80-217904
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor	**0.018**	**$(mg/kg\text{-}d)^{-1}$**			**OPP**
EPA Carcinogen classification	C				
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.5	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	38.5	µg/L			
Health Reference Level (HRL)[2] cancer	1.94	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**4,600**	**130**	**2.83**	**0.003**	**37.8**	**0.22**	**2**	**8.34**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	5,313,290	lbs/yr	15	States	1997	
TRI Release - surface water	1,736	lbs/yr	1	States	2004	
TRI Release - total	1,776	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP	345			0.0018	0.0105			ug/L	Pesticide Data Program (USDA); 2002
PPMP		24	7.7		0.264		0.145	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) raw water, 9060(HPLC/MS)
PPMP		19	8.4		0.1		0.062	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) finished water, 9060(HPLC/MS)
HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 19.25				Cancer: 0.97				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	363	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.42	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.80E-09	atm-m^3/mol		
Water Solubility	110	mg/L		
% water PBT profiler				

Contaminant	Fluoroacetic acid
Substance Key:	6203
Contaminant ID (CASRN):	144490

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	7	5	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.00002**	**mg/kg-d**		**Increased heart weight, decreased testes weight and spermatogenisis - Sodium salt This is essentially the same as sodium fluoroacetate**	**Reference Dose**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	0.468	mg/kg	1996		Lewis, R. J. Saxs Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 1671
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Former rodenticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	500	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	50	mg/L		
% water PBT profiler	**38**			

Contaminant	Fomesafen
Substance Key:	62548
Contaminant ID (CASRN):	72178020

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	9	7

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.19**	**$(mg/kg\text{-}d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1988	adenoma and carcinoma; liver	Huntingdon, 1985; mouse study
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.184	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,100,341**	**lbs/yr**	**24**	**States**	**1997**	
TRI Release - surface water	2,342	lbs/yr	2	States	2004	
TRI Release - total	42,651	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	6-12 months	length of time	BST	BST = Biodegrades sometimes/recalcitrant (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	11,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.9	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.54E-13	atm-m^3/mol		
Water Solubility	50	mg/L		
% water PBT profiler				

Contaminant	Fonofos
Substance Key:	10236
Contaminant ID (CASRN):	944229

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 311

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.002**	**mg/kg-d**	**1986**	**RBC ChE inhibition, cholinergic symptoms (tremors, lacrimation, salivation), increased liver weight**	**Reference Dose, Stauffer Chemical Co, 1969, NOEL 0.2, dog, UF=100**
EPA HA RfD	0.002	mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		RBC ChE inhibition, cholinergic symptoms (tremors, lacrimation, salivation), increased liver weight	Reference Dose, Stauffer Chemical Co, 1969, NOEL/LEL, dog, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.07				Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,116	95	1.34	0.001	1.2	0.007	0.045	0.21	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	417,372	lbs/yr	33	States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	283							ug/L	Pesticide Data Program (USDA) 2001
PDP	669	1	0.1	0.0075	0.0075			ug/L	Pesticide Data Program (USDA) 2002
PPMP	3	1.3		0.04				ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2002(GC/MS)

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 311	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Restricted use insecticide; fumigant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	864	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.97E-06	atm-m^3/mol		
Water Solubility	15.7	mg/L		
% water PBT profiler	17			

Contaminant	Formetanate hydrochloride
Substance Key:	27710
Contaminant ID (CASRN):	23422539

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	7	10	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 56.9

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00065**	**mg/kg-d**		**Cholinesterase inhibition in the pup brain**	**Reference Dose; IRED**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	18	mg/kg	1979		mouse; Worthing, C. R. (ed.). Pesticide Manual. 6th ed. Worcestershire, England: British Crop Protection Council, 1979., p. 284
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4.55	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**134,527**	**lbs/yr**	**27**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
OPP Estimated Environmental Concentration		Surface water chronic: 0.08 ug/L				Ground water chronic:			
HRL Ratios (HRL/SWC EEC)	Non-cancer: 56.9				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	3.2-212	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.30E-19	atm-m^3/mol		
Water Solubility	>500,000	mg/L		
% water PBT profiler	42			

Contaminant	Formic acid
Substance Key:	2463
Contaminant ID (CASRN):	64186

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**2**	**mg/kg-d**	**1990**	**Decreased growth**	**Reference Dose, U.S. EPA, NOAEL, rat, UF=100**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	360	mg/kg-d	1921	Behavioral - food intake (animal), Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 9-week oral study in rat; JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1-1909/10- Volume(issue)/page/year 16,463,1921
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	700	mg/kg	1979	Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea	rodent, mouse; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 23(12),49,1979
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	240,191	lbs/yr	22	States	2004	
TRI Release - total	**10,144,003**	**lbs/yr**	**38**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Food additive; chemical intermediate; pesticide; in paint strippers (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.54	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.67E-07	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Furan
Substance Key:	4814
Contaminant ID (CASRN):	110009

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	6	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.001**	**mg/kg-d**	**1987**	**Minimal to mild liver lesions. Increased relative liver weight**	**Reference Dose, NTP, 1982, NOAEL 2, mouse, UF=1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.001	mg/kg-d		liver	Reference Dose, NTP, 1982, NOAEL/LOAEL, mouse, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	21.4	mg/kg-d	1993	Liver - other changes, Liver - changes in liver weight, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 13-week oral study in mouse; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206-Volume(issue)/page/year NTP-TR-402,1993
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>10M-50M**	**lbs/yr**	**1998**			
		lbs/yr	2002			

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**89.7**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00541	atm-m^3/mol		
Water Solubility	10,000	mg/L		
% water PBT profiler				

Contaminant	Furfural
Substance Key:	3927
Contaminant ID (CASRN):	98011

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.003**	**mg/kg-d**	**1988**	**Mild hepatocellular vacuolization**	**Reference Dose, NTP, 1981a, LOAEL 11, rat. UF=3000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.003	mg/kg-d		liver	Reference Dose, NTP, 1981, LOAEL, rat. UF=3000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	53.6	mg/kg-d	1990	Liver - changes in liver weight	Lowest Observed Adverse Effect Level; 13-week oral study in mouse; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206-Volume(issue)/page/year NTP-TR-382,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Cancelled pesticide; flavoring; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**17.7**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.41	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.38E-06	atm-m^3/mol		
Water Solubility	77,000	mg/L		
% water PBT profiler				

Contaminant	Furfuryl alcohol
Substance Key:	3826
Contaminant ID (CASRN):	96297

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**4**	**mg/kg-d**		**Hematological effects, increase in spleen relative and absolute weights.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	75	mg/kg-d		Endocrine - changes in spleen weight, Blood - pigmented or nucleated red blood cells, Blood - changes in erythrocyte (RBC) count	Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0524679; 13 week rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	930	mg/kg		Details of toxic effects not reported other than lethal dose value	Rodent-rat; TSCAT Office of Toxic Substances Report. (U.S. Environmental Protection Agency, Office of Toxic Substances, 401 M St., SW, Washington, DC 20460) Volume(issue)/page/year OTS 513319
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28	ug/L			
Health Reference Level (HRL)[2] cancer		ug/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Antioxidant (ChemIDPlus); Industrial chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.63	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.04E-05	atm-m^3/mol		
Water Solubility	100,000	mg/L		
% water PBT profiler	**44**			

Contaminant	gamma-Butyrolactone
Substance Key:	3838
Contaminant ID (CASRN):	96480

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**175**	**mg/kg-d**		**Decreased respiration and activity in mice.**	**Supplemental Data; NTP Report 406**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	262	mg/kg-d		Hyperplasia of the adrenal medula (males) decreased body weight gain (females). Cancer equivocal evidence male mice. No evidence male or female rats and female mice	Supplemental Data; NTP Report 406
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 11, Suppl. 7, Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,225	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>50M - 100M	**lbs/yr**	**2002**			

Use	Chemical intermediate; solvent in PPCPs (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	7.1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.64	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.30E-08	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**40**			

Contaminant	Glutaraldehyde
Substance Key:	4927
Contaminant ID (CASRN):	111308

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.3**	**mg/kg-d**	**1987**	**Liver - fatty liver degeneration, Nutritional and Gross Metabolic - weight loss or decreased weight gain, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 52(3),77,1987**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>10M-50M	lbs/yr	1998						
	>10M-50M	**lbs/yr**	**2002**						
Use	Pesticide; embalming fluid; chemical intermediate (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.18	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.10E-07	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**44**			

Contaminant	Glycerine
Substance Key:	2289
Contaminant ID (CASRN):	56815

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	8	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	16	mg/kg-d	2000	Skin and Appendages - tumors, Tumorigenic - facilitates action of known carcinogen	Lowest Observed Adverse Effect Level; 25-week study in mouse. CALEDQ Cancer Letters (Shannon, Ireland). (Elsevier Scientific Pub. Ireland Ltd., POB 85, Limerick, Ireland) V.1- 1975- Volume(issue)/page/year 155,61,2000
Supplemental LOAEL	**950**	**mg/kg-d**		**GI tract: hyperaemia, petechial haemorrhage or erosions (DR)**	**Supplemental Data, SIDS**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	4,090	mg/kg	1977	Details of toxic effects not reported other than lethal dose value	rodent, mouse; FRZKAP Farmatsevtichnii Zhurnal (Kiev). (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.3- 1930- Volume(issue)/page/year (6),56,1977
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,217	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Cancelled pesticide; in PPCPs; food additive; in resins (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.76	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.75E+11	atm-m^3/mol		
Water Solubility	1,220,000	mg/L		
% water PBT profiler	**36**			

Contaminant	Glycidol
Substance Key:	7880
Contaminant ID (CASRN):	556525

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	1	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**19**	**mg/kg-d**		**Effects on sperm count and testicular histopathology**	**Supplemental Data; NTP**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	150	mg/kg-d	1990	Brain and Coverings - demyelination, Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis) testicular atrophy, reduced survival, Related to Chronic Data - death Clear evidence of carcinogenicity in mice and rats 2 species and 2-sexes	Supplimental Data, NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-374,1990
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2A				Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	133	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>10K-500K**	**lbs/yr**	**1998**			
		lbs/yr	2002			

Use	Chemical intermediate; stabilizer (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.95	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.84E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Glyoxal
Substance Key:	4600
Contaminant ID (CASRN):	107222

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	**0.2**	**mg/kg-d**		**decreased body weight gain**	**Tolerable Daily Intake; IPCS CICAD 2004**
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	297	mg/kg-d	1991	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Nutritional and Gross Metabolic - weight loss or decreased weight gain, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other transferases	Lowest Observed Adverse Effect Level; 90-day oral study in rat; FAATDF Fundamental and Applied Toxicology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1-40, 1981-97. For publisher information, see TOSCF2 Volume(issue)/page/year 16,763,1991
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	200	mg/kg		Behavioral - muscle weakness	rodent, rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0533618
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	In textiles; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.33E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	HCFC-133a
Substance Key:	2690
Contaminant ID (CASRN):	75887

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		3	6

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 41, Suppl 7, Vol 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	23	lbs/yr	1	States	2004	
TRI Release - total	**56,253**	**lbs/yr**	**3**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Refrigerant; chemical intermediate (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	30	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.27	atm-m^3/mol		
Water Solubility	9,200	mg/L		
% water PBT profiler	47			

Contaminant	Heptane
Substance Key:	6156
Contaminant ID (CASRN):	142825

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**2.86**	**mg/kg-d**		**Liver - changes in liver weight**	**Lowest Observed Adverse Effect Level, NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0571116**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	6.67	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Gasoline standard; anesthetic, solvent, in organic synthesis (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**275**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	4.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.00E+00	atm-m^3/mol		
Water Solubility	3.4	mg/L		
% water PBT profiler				

Contaminant	Hexachlorobutadiene
Substance Key:	3263
Contaminant ID (CASRN):	87683

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	4	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 0.28

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	**0.0002**	**mg/kg-d**		**Increase in urinary coproporphyrin excretion & increase in renal tubular epithelial hyperplasia/proliferation**	**Reference Dose**
RAISHE RfD	0.0002	mg/kg-d		regeneration	Reference Dose, USEPA, 1993; Basis LOAEL, mouse, UF=1000
ATSDR (ITER), MRL	0.0002	mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.00034	mg/kg-d	1996	kidney	Tolerable Daily Intake, ,Yang et al., 1989, NTP 1991, BMLD(50), mouse, UF=100
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2	mg/kg-d	1965	Liver - other changes, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Immunological Including Allergic - increase in cellular immune response	Lowest Observed Adverse Effect Level; 30-week oral study in guinea pig; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 9(11),50,1965
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.05	mg/L			
RAISHE Slope Factor	0.078	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.4	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,284**	**43**	**0.35**	**0.05**	**10**	**0.25**	**5**	**10**	**ug/L**	
NCOD Round 2 finished water	22,736	41	0.18	0.1	1.5	**0.3**	0.8	1.5	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,310	0	0	0.14	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	742	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 0.28	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Chemical intermediate; chlorine gas scavenger; solvent; hydraulic fluids (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	994	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0103	atm-m^3/mol		
Water Solubility	3.2	mg/L		
% water PBT profiler				

Contaminant	Hexachloroethane
Substance Key:	2514
Contaminant ID (CASRN):	67721

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.001**	**mg/kg-d**		**Renal lesions, including renal atrophy, degeneration, hypertrophy, & dilation**	**Referenc Dose, Gorzinski et al., 1985, NOAEL 1 mg/kg-d, rat, UF=1000**
EPA HA RfD	0.001	mg/kg-d			Reference Dose
RAISHE RfD	0.001	mg/kg-d		kidney, atrophy and degeneration of renal tubules	Reference Dose,Gorzinski et al., 1985, NOAEL/LOAEL, rat, UF=1000
ATSDR (ITER), MRL	0.01	mg/kg-d			Minimal Risk Level; Int
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.3	mg/L			
RAISHE Slope Factor	0.014	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.039	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; RAISHE; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	µg/L			
Health Reference Level (HRL)[2] cancer	3	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**2,618**	**0**	**0**	**0.05**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	1,015	lbs/yr	8	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
	>10K-500K	lbs/yr	2002			
Use	Flame inhibitor/retardant; polymer additive; in organic synthesis (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	10,600	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.00E-05	atm-m^3/mol		
Water Solubility	0.25	mg/L		
% water PBT profiler				

Contaminant	Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine
Substance Key:	16177
Contaminant ID (CASRN):	4719044

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	9	6	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1.99**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value - Dermal sensitization**	**USXXAM United States Patent Document. (U.S. Patent Office, Box 9, Washington, DC 20231) Volume(issue)/page/year #3824309**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Bacteriocide (ChemIDPlus)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**47**			

Contaminant	Hexahydroazepine
Substance Key:	4944
Contaminant ID (CASRN):	111499

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**90**	**mg/kg-d**		**Some discomfort on dosing**	**Supplemental Data; OPPT Summary, NOAEL**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	20.7	mg/kg		Behavioral - food intake (animal), Lungs, Thorax, or Respiration - pulmonary emboli, Liver - other changes	Rodent, rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0534842
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	630	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>1M-10M	**lbs/yr**	**2002**

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	170	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.10E-06	atm-m^3/mol		
Water Solubility	31,900	mg/L		
% water PBT profiler	**36**			

Contaminant	Hexamethylene-1,6-diisocyanate
Substance Key:	9801
Contaminant ID (CASRN):	822060

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	7	3

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**350**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**LD50,TAKHAA Takeda Kenkyusho Ho. Journal of the Takeda Research Laboratories. (Takeda Yakuhin Kogyo K.K., 2-17-85 Jusohon-machi, Yodogawa-ku, Osaka 532, Japan) V.29- 1970- Volume(issue)/page/year 39,202,1980, rodent, mouse**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>50M-100M	**lbs/yr**	**2002**

Use	Polymer additive; adhesive; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**5,864**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	3.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.80E-05	atm-m^3/mol		
Water Solubility	117	mg/L		
% water PBT profiler				

Contaminant	Hexamethylenediamine
Substance Key:	5553
Contaminant ID (CASRN):	124094

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	10	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**150**	**mg/kg-d**		**2-generation study; reduced litter size, reduced maternal and pup weights**	**Supplemental Data, Short et al, 1991, NOAEL**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	750	mg/kg	1977	Details of toxic effects not reported other than lethal dose value	rodent, rat; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 42,417,1977
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,050	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			
Use	Chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	286	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.20E-09	atm-m^3/mol		
Water Solubility	2,460,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Hexamethylenetetramine
Substance Key:	4151
Contaminant ID (CASRN):	100970

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	2	7	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**1,234**	**mg/kg-d**		**Yellow discoloration of fur**	**Supplemental Data, Porta, 1965, LOAEL**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	569	mg/kg	1970	Behavioral - excitement, Behavioral - muscle contraction or spasticity	Rodent, mouse; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 35(3),115,1970
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,879	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Adhesives/coatings; medications; catalyst (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	553	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.60E-09	atm-m^3/mol		
Water Solubility	667,000	mg/L		
% water PBT profiler	**98**			

Contaminant	HMX
Substance Key:	13804
Contaminant ID (CASRN):	2691410

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	3	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.05**	**mg/kg-d**	**1988**	**Hepatic lesions**	**Reference Dose; U.S. DOD, 1985a; Basis NOAEL 50 mg/kg-d, rat, UF=1000**
EPA HA RfD	0.05	mg/kg-d	1988		Reference Dose
RAISHE RfD	0.05	mg/kg-d		Hepatic lesions	Reference Dose; U.S. DOD, 1985a; Basis NOAEL/LOAEL 50 mg/kg-d, rat, UF=1000
ATSDR (ITER), MRL	0.05	mg/kg-d	1997	Hepatic	Minimal Risk Level; Int
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.994	mg/kg-d	1975	Brain and Coverings - other degenerative changes, Behavioral - alteration of classical conditioning	Lowest Observed Adverse Effect Level; 22-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 40(11),17,1975
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1989		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	2	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>500K-1M	**lbs/yr**	**2002**

Use	Explosive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**1,853**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.82	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.66E-10	atm-m^3/mol		
Water Solubility	2,556	mg/L		
% water PBT profiler				

Contaminant	Hydrochloric acid
Substance Key:	19106
Contaminant ID (CASRN):	7647010

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**900**	**mg/kg**	**1996**	**Details of toxic effects not reported other than lethal dose value**	**Lewis, R.J. Sax's Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 1835, rabbit**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1B	lbs/yr	1998
	>1B	**lbs/yr**	**2002**

Use	Chemical intermediate; in food processing (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient	**14.3**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.54	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0245	atm-m^3/mol		
Water Solubility	42,400	mg/L		
% water PBT profiler				

Contaminant	Hydrocinnamic acid, 3,5-di-tert-butyl-4-hydroxy-, methyl ester
Substance Key:	17833
Contaminant ID (CASRN):	6386385

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**600**	**mg/kg-d**		**Behavioral - food intake (animal), Liver - other changes, Blood - changes in leukocyte (WBC) count**	**Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0539881; 90-day rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,400	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>50M - 100M	**lbs/yr**	**2002**

Use	Solvent; chemical intermediate; in etching (HSDB - uses for 1,2-, 1,3- and 1,4-diethylbenzene)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**6**			

Contaminant	Hydrogen sulfide
Substance Key:	19345
Contaminant ID (CASRN):	7783064

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	10	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.003**	**mg/kg-d**	**1987**	**Gastrointestinal disturbance. RfD withdrawn in IRIS 2003. Questionable study.**	**Reference Dose, Watterau et al., 1964, NOAEL, pig, UF=1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.03	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; disinfectant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	14.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00869	atm-m^3/mol		
Water Solubility	3,740	mg/L		
% water PBT profiler				

Contaminant	Hydroquinone
Substance Key:	5502
Contaminant ID (CASRN):	123319

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	8	8

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.04	mg/kg-d		Hematological effects	Reference Dose, Carlson and Brewer, NOAEL, human, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	35.7	mg/kg-d	1994	Kidney, Ureter, Bladder - changes in tubules (including acute renal failure, acute tubular necrosis), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - multiple enzyme effects	Lowest Observed Adverse Effect Level; 6-week oral study in rat; FAATDF Fundamental and Applied Toxicology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1-40, 1981-97. For publisher information, see TOSCF2 Volume(issue)/page/year 23,397,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.056**	**$(mg/kg-d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	280	µg/L			
Health Reference Level (HRL)[2] cancer	0.625	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	11,265	lbs/yr	4	States	2004	
TRI Release - total	**574,933**	**lbs/yr**	**14**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>50M-100M	lbs/yr	2002			

Use	Photographic chemical; antioxidant; chemical intermediate; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	434	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.59	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.72E-11	atm-m^3/mol		
Water Solubility	72,000	mg/L		
% water PBT profiler				

Contaminant	Hydroxyethyl methacrylate
Substance Key:	9951
Contaminant ID (CASRN):	868779

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**30**	**mg/kg-d**		**Decreased relative organ weight**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.5	mg/kg-d	1987	Liver - other changes, Blood - changes in spleen	Lowest Observed Adverse Effect Level; 35-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 52(11),81,1987
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,275	mg/kg	1989	Behavioral - coma	Rodent-mouse; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 54(9),75,1989
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	43	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.60E-09	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Iron pentacarbonyl
Substance Key:	22932
Contaminant ID (CASRN):	13463406

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	9	2	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**12**	**mg/kg**	**1996**	**Nanomaterial - no information provided**	**Lewis, R.J. Saxs Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 1946, rabbit**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**43,517**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
		lbs/yr	2002			
Use	Gasoline additive; chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	50-100	mg/L		
% water PBT profiler				

Contaminant	Isobutanol
Substance Key:	2836
Contaminant ID (CASRN):	78831

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	8	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.3**	**mg/kg-d**		**Hypoactivity & ataxia**	**Reference Dose, U.S.EPA, 1986, NOEL 316 mg/kg-d, rat, UF=1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	3	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1,022	mg/kg-d		Behavioral - somnolence (general depressed activity), Nutritional and Gross Metabolic - changes in potassium, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 13-week oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0531063
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	74.1	mg/kg	1984	Details of toxic effects not reported other than lethal dose value	VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,102,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,100	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Former pesticide; solvent; flavoring (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**2.05**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.76	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.79E-06	atm-m^3/mol		
Water Solubility	85,000	mg/L		
% water PBT profiler				

Contaminant	Isobutene
Substance Key:	5093
Contaminant ID (CASRN):	115117

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	8

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			Some evidence of carcinogenicity in male rats (NTP)
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; octane enhancer; in polymers (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	450	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.218	atm-m^3/mol		
Water Solubility	263	mg/L		
% water PBT profiler	**88**			

Contaminant	Isobutyl acetate
Substance Key:	4829
Contaminant ID (CASRN):	110190

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	7	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**4,763**	**mg/kg**	**1972**	**Details of toxic effects not reported other than lethal dose value**	**Rodent-rabbit; IMSUAI Industrial Medicine and Surgery. (Northbrook, IL) V.18-42, 1949-73. For publisher information, see IOHSA5. Volume(issue)/page/year 41,31,1972**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>50M-100M	**lbs/yr**	**2002**

Use	Food additive; solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	200	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00045	atm-m^3/mol		
Water Solubility	6,300	mg/L		
% water PBT profiler	**37**			

Contaminant	Isobutyronitrile
Substance Key:	2835
Contaminant ID (CASRN):	78820

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	9	5	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**25**	**mg/kg**	**1996**	**Details of toxic effects not reported other than lethal dose value**	**Lewis, R.J. Saxs Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 1960, mouse**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1998**			
		lbs/yr	2002			

Use	Chemical intermediate; gasoline additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	42	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.46	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.39E-05	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**43**			

Contaminant	Isooctyl acrylate
Substance Key:	30980
Contaminant ID (CASRN):	29590429

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**5,000**	**mg/kg**	**1991**	**Behavioral - somnolence (general depressed activity), Behavioral - ataxia, Gastrointestinal - hypermotility, diarrhea**	**JTEHD6 Journal of Toxicology and Environmental Health. (Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005) V.1- 1975/76- Volume(issue)/page/year 34,297,1991, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Industrial chemical (EPA/SRS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**16**			

Contaminant	Isophthalic acid
Substance Key:	5410
Contaminant ID (CASRN):	121915

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	8	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**250**	**mg/kg-d**		**Kidney effects - crystalluria, mild hydronephrosis, pelvic calcification**	**Supplemental Data, Sid assessment**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	10,400	mg/kg	1986	Details of toxic effects not reported other than lethal dose value	rodent-rat; 85JCAE "Prehled Prumyslove Toxikologie; Organicke Latky," Marhold, J., Prague, Czechoslovakia, Avicenum, 1986 Volume(issue)/page/year -,317,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,750	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chemical and polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	72	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.90E-13	atm-m^3/mol		
Water Solubility	130	mg/L		
% water PBT profiler	**27**			

Contaminant	Isoprene
Substance Key:	2833
Contaminant ID (CASRN):	78795

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	8	8

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**2.49**	**mg/kg-d**	**1959**	**Behavioral - alteration of classical conditioning**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 24(6),8,1959**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	5.81	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	In synthesis of rubber and natural products (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	490	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.42	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.077	atm-m^3/mol		
Water Solubility	642	mg/L		
% water PBT profiler	**89**			

Contaminant	Isopropanol
Substance Key:	2509
Contaminant ID (CASRN):	67630

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	7	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
BMDL	**407**	**mg/kg-d**		**Decrease in male mating index.(another study- Gentry, et al. give 500mg/kg NOAEL and also add decreased fetal body weight).**	**Supplemental Data (Benchmark Dose), BMDL10, Shipp et al. 1996**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	18	mg/kg-d	1994	Endocrine - effect on menstrual cycle; Reproductive - Paternal Effects - spermatogenesis (incl. genetic material, sperm morphology, motility, and count)	Lowest Observed Adverse Effect Level; 122-day oral study in rat; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	4.5	mg/kg	1993-1994		mouse; Clayton, G. D., F. E. Clayton (eds.) Patty's Industrial Hygiene and Toxicology. Volumes 2A, 2B, 2C, 2D, 2E, 2F: Toxicology. 4th ed. New York, NY: John Wiley & Sons Inc., 1993-1994., p. 2630
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,600	mg/kg		Behavioral - altered sleep time (including change in righting reflex), Behavioral - somnolence (general depressed activity); **AND** Behavioral - general anesthetic	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 43(1),8,1978; AND VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,97,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,849	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Pesticide; food additive; solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**1.06**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.05	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.10E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Isopropyl formate
Substance Key:	8937
Contaminant ID (CASRN):	625558

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	9	5	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1.4**	**mg/kg**	**1969**	**Details of toxic effects not reported other than lethal dose value**	**28ZEAL "Pesticide Index," Frear, E.H., ed., State College, PA, College Science Pub., 1969 Volume(issue)/page/year 4,256,1969, rodent-guinea pig**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Fumigant; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	18	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000775	atm-m^3/mol		
Water Solubility	20,700	mg/L		
% water PBT profiler	**49**			

Contaminant	Isopropylamine
Substance Key:	2645
Contaminant ID (CASRN):	75310

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	8	8

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**111**	**mg/kg**		**Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea, Gastrointestinal - other changes**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0542011, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	30	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.26	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**49**			

Contaminant	Kodaflex txib
Substance Key:	18352
Contaminant ID (CASRN):	6846500

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	7	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**30**	**mg/kg-d**		**Increased liver weight; Increase in grade of change of renal tubular epithelium and hyaline droplet degeneration.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			
Use	Plasticizer in food packaging (ChemIDPlus)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**12**			

Contaminant	Lactofen
Substance Key:	65964
Contaminant ID (CASRN):	77501634

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 4,667

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.008**	**mg/kg-d**		**Kidney lesions and weight changes to the thyroid and adrenal glands**	**Reference Dose**
EPA IRIS (ITER) RfD	0.002	mg/kg-d	1987	Incr. abs./rel. liver weight; hepatocytomegaly-M	Reference Dose, PPG Industries, 1985a, LEL 1.5 mg/kg-d, mouse, UF=1000
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		Increased absolute and relative weight; hepatocytomegaly in males	Reference Dose, PPG Industries, 1985a, LEL, mouse, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	56	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**389,388**	**lbs/yr**	**26**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2002	
TRI Release - total	0	lbs/yr	0	States	2002	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	115								Pesticide Data Program (USDA) 2002

OPP Estimated Environmental Concentration	Surface water chronic: 0.012 ug/L	Ground water chronic:	

HRL Ratios (HRL/SWC EEC)	Non-cancer: 4,667	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	25,400	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.81	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.73E-10	atm-m^3/mol		
Water Solubility	0.1	mg/L		
% water PBT profiler	3			

Contaminant	Lactonitrile
Substance Key:	2849
Contaminant ID (CASRN):	78977

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**6**	**mg/kg-d**		**Liver cell enlargement or alteration, Blood- signif decreases in GOT and signif increases in total protein, albumin, and Ca. Swelling of Liver.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	31	mg/kg			male`
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	42	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr				
	>10M-50M	**lbs/yr**	**1994**			

Use	Solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**9 min**	**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.80E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**45**			

Contaminant	lambda-Cyhalothrin
Substance Key:	67650
Contaminant ID (CASRN):	91465086

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	10	6

3-model Categorical Prediction
L? - L
HRL Ratio(s)
NC HRL/SWC EEC: 357

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.005**	**mg/kg-d**		**Decreased maternal weight gain during pregnancy; decreased neonatal weight gain during weaning**	**Reference Dose**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	56	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,203,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**321,284**	**lbs/yr**	**43**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PPMP	0	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 9002(GC/MS)

OPP Estimated Environmental Concentration	Surface water chronic: 0.098 ug/L	Ground water chronic: 0.012 ug/L	

HRL Ratios (HRL/SWC EEC)	Non-cancer: 357	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB - data for cyhalothrin, CASRN 68085-85-8)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.35E-05	atm-m^3/mol		
Water Solubility	8,530	mg/L		
% water PBT profiler	1			

Contaminant	Lead acetate
Substance Key:	11430
Contaminant ID (CASRN):	1335326

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	5	10

3-model Categorical Prediction
L
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.038**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B				From OEHHA
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.921	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M - 10M**	**lbs/yr**	**1986**			
		lbs/yr	2002			

Use	Analytical reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-4	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	**250,000**	**mg/L**		
% water PBT profiler				

Contaminant	Linuron
Substance Key:	6584
Contaminant ID (CASRN):	330552

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 215

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.008**	**mg/kg-d**		**Decreased RBC count, hematocrit & hemoglobin levels**	**Reference Dose; du Pont, 1962**
EPA IRIS (ITER) RfD	0.002	mg/kg-d	1986		Reference Dose
EPA HA RfD		mg/kg-d		Abnormal blood pigment	Reference Dose; du Pont, 1962; Basis LEL 0.625 mg/kg-d, dog, UF=300
RAISHE RfD	0.002	mg/kg-d		Abnormal blood pigment	Reference Dose; du Pont, 1962; Basis LEL, dog, UF=300
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	4.93	mg/kg-d	1975	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other Enzymes	Lowest Observed Adverse Effect Level; 31-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 40(7),46,1975
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C		1989		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	56	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**298**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,142	105	1.47	0.0005	1.4	0.03	0.26	0.74	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	516,133	lbs/yr	35	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	11	lbs/yr	2	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	154							ug/L	Pesticide Data Program (USDA) 2001
PDP	339							ug/L	Pesticide Data Program (USDA)2002
PPMP		1	0.3					ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2001 (GC/MS)
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 9060 (HPLC/MS)
	# Sites	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**Units for Mag data**	**Notes**
CAL DHS	142	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 215	Cancer:

Production	Amount Range	Units	Year			Notes
CUSIUR Production Data	10K-500K	lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	350	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.26E-09	atm-m^3/mol		
Water Solubility	75	mg/L		
% water PBT profiler	12			

Contaminant	Lithium carbonate
Substance Key:	7842
Contaminant ID (CASRN):	554132

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	8	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**10**	**mg/kg-d**	**1999**	**Brain and Coverings - recordings from specific areas of CNS, Liver - liver function tests impaired, Blood - pigmented or nucleated red blood cells**	**Lowest Observed Adverse Effect Level, STGNBT "Spravochnik po Toksikologii i Gigienicheskim Normativam (PDK) Potentsial'no Opasnykh Khimicheskikh Veshchestv" Kushneva, V.S., and R.B. Gorshkova, eds. 46, Zhivopisnaya St., 123182, Moscow, Russia, IzdAT 1999**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	404	mg/kg	1998	Peripheral Nerve and Sensation - flaccid paralysis with appropriate anesthesia, Behavioral - tetany, Cardiac - arrhythmias (including changes in conduction)	VCVN1 "Vrednie chemichescie veshestva. Neorganicheskie soedinenia elementov I-IV groopp" (Hazardous substances. Inornanic substances containing I-IV group elements), Filov V.A., Chimia, 1988. Volume(issue)/page/year -,25,1998
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	23.3	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**211,661**	**lbs/yr**	**14**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Coatings; chemical intermediate; medication (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	13,100	mg/L		
% water PBT profiler				

Contaminant	Lithium chloride
Substance Key:	18915
Contaminant ID (CASRN):	7447418

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	6	1	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.009**	**mg/kg-d**	**1999**	**Cardiac - pulse rate increase, without fall in BP, Liver - liver function tests impaired, Blood - changes in erythrocyte (RBC) count**	**Lowest Observed Adverse Effect Level; STGNBT "Spravochnik po Toksikologii i Gigienicheskim Normativam (PDK) Potentsial'no Opasnykh Khimicheskikh Veshchestv" Kushneva, V.S., and R.B. Gorshkova, eds. 46, Zhivopisnaya St., 123182, Moscow, Russia, IzdAT 1999**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	526	mg/kg	1998	Behavioral - tetany, Lungs, Thorax, or Respiration - respiratory depression, Gastrointestinal - hypermotility, diarrhea	VCVN1 "Vrednie chemichescie veshestva. Neorganicheskie soedinenia elementov I-IV groopp" (Hazardous substances. Inornanic substances containing I-IV group elements), Filov V.A., Chimia, 1988. Volume(issue)/page/year -,26,1998
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?					
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.021	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
	10K-500K	**lbs/yr**	**2002**			

Use	Chemical intermediate; salt baths; dessicant; in welding (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	832,000	mg/L		
% water PBT profiler				

Contaminant	Malathion
Substance Key:	5402
Contaminant ID (CASRN):	121755

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	9	3

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 5,698

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.07**	**mg/kg-d**		**RBC ChE inhibition**	**Reference Dose, Moeller and Rider, 1962**
EPA IRIS (ITER) RfD	0.02	mg/kg-d	1987	Red blood cell cholinesterase inhibition	Reference Dose, Moeller and Rider, 1962, basis NOEL 0.23 mg/kg-d, human, UF=10
EPA HA RfD	0.02	mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d		RDB ChE depression	Reference Dose, Moeller and Rider, 1962, basis NOEL/LEL, human, UF=10
ATSDR (ITER), MRL	0.02	mg/kg-d		cholinesterase inhibition	Minimal Risk Level, Daly, 1996, basis NOAEL 2 mg/kg-d, rat, UF=100
JMPR, maximum ADI	0.3	mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.34	mg/kg-d	2001	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase	Lowest Observed Adverse Effect Level; 56-day oral study in human; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 1,59,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen	UMD
EPAHA-DWEL	0.8	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	490	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			
CADW MAC	0.19	mg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,117**	**344**	**4.83**	**0.0015**	**9.58**	**0.014**	**0.086**	**0.39**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	5,809,943	lbs/yr	42	States	1997	
	10,288	lbs/yr	2	States	2004	
TRI Release - total	24,199	lbs/yr	8	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	283							ug/L	Pesticide Data Program (USDA) 2001
PDP	669							ug/L	Pesticide Data Program (USDA) 2002
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2001(GC/MS)
CAL DHS	271	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 5,698			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide; veterinary medicine (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	11 days	length of time	DF	DF = Degrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	30.5	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.36	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.89E-09	atm-m^3/mol		
Water Solubility	143	mg/L		
% water PBT profiler				

Contaminant	Maleic anhydride
Substance Key:	4681
Contaminant ID (CASRN):	108316

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.1**	**mg/kg-d**		**Renal lesions**	**Reference Dose U.S. EPA, 1982, NOAEL 10mg/kg-d, rat, UF=100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.1	mg/kg-d			Reference Dose, EPA 1983, NOAEL/LOAEL, rat, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	390	mg/kg	1982	Details of toxic effects not reported other than lethal dose value	Rodent, guinea pig; 85GMAT "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982 Volume(issue)/page/year -,79,1982
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	2,185	lbs/yr	4	States	2004	
TRI Release - total	**769,446**	**lbs/yr**	**31**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500M-1B	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			

Use	Chemical intermediate; petroleum additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	0.37 minutes	length of time	DF	DF = Degrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.62	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.94E-06	atm-m^3/mol		
Water Solubility	4,912	mg/L		
% water PBT profiler	35			

Contaminant	Maleic hydrazide
Substance Key:	5504
Contaminant ID (CASRN):	123331

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.25**	**mg/kg-d**		**Decreased body weight gain**	**Reference Dose**
EPA IRIS (ITER) RfD	0.5	mg/kg-d	1986	Kidney	Reference Dose, Uniroyal Chemical, 1981, basis LEL 500 mg/kg-d, rat, UF=1000
EPA HA RfD	0.5	mg/kg-d			Reference Dose
RAISHE RfD	0.5	mg/kg-d		Renal dysfunction	Reference Dose; Uniroyal Chemical, 1981, basis LEL, rat, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.3	mg/kg-d	1996		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	20	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,750	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**2,143,154**	**lbs/yr**	**36**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	10.4	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.84	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.64E-11	atm-m^3/mol		
Water Solubility	4,510	mg/L		
% water PBT profiler				

Contaminant	Malononitrile
Substance Key:	4794
Contaminant ID (CASRN):	109773

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	2	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.0001**	**mg/kg-d**		**hepatic effects**	**Reference Dose, Lonza 1989, NOAEL, rat, UF=3000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	5.86	mg/kg-d		Liver - other changes, Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; 28-day oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0526327
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data									s	
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**854,039**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Chemical intermediate; petroleum additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	15.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.6	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.27E-08	atm-m^3/mol		
Water Solubility	133,00	mg/L		
% water PBT profiler	39			

Contaminant	Maneb
Substance Key:	22381
Contaminant ID (CASRN):	12427382

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	5	10	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.05**	**mg/kg-d**	**1977**	**Increased thyroid weight & follicular cell hypertrophy, decreased T4**	**Reference Dose, Rohm and Haas Co., 1977; Maneb Task Force, 1986,**
EPA IRIS (ITER) RfD	0.005	mg/kg-d	1988	increased thyroid weight	Reference Dose, Rohm and Haas Co., 1977; Maneb Task Force, 1986, NOEL 5mg/kg-d, primate, UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.005	mg/kg-d		increased weight	Reference Dose; Maneb Task Force, 1986, NOEL/LEL, monkey, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d	1993		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.05	mg/kg-d		thyroid	Tolerable Daily Intake, NOAEL, Ulrich, 1986 and 1987 as cited in JMPR, 1984, rat, UF=100
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**3,039,930**	**lbs/yr**	**43**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	335	lbs/yr	1	States	2004	

Supplemental Water Data									Notes
OPP Estimated Environmental Concentration		Surface water chronic: 0 ug/L				Ground water chronic: 0 ug/L			
HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	10	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.62	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.65E-07	atm-m^3/mol		
Water Solubility	6.2	mg/L		
% water PBT profiler				

Contaminant	MCPA
Substance Key:	3709
Contaminant ID (CASRN):	94746

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	6	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 45.29

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0044**	**mg/kg-d**		**Hepatotoxicity & nephrotoxicity**	**Reference Dose**
EPA IRIS (ITER) RfD	0.0005	mg/kg-d		kidney, liver	Reference Dose, Industry Task Force on MCPA, 1986a, Basis NOEL 0.15 mg/kg-d, dog, UF=300
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0005	mg/kg-d			Reference Dose, Industry Task Force on MCPA, 1986a, Basis NOEL/LEL, dog, UF=300
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	3.9	mg/kg-d	1990	Tumorigenic - carcinogenic by RTECS criteria, Blood - leukemia	Lowest Observed Adverse Effect Level; 78-week oral study in mouse; TJEMAO Tohoku Journal of Experimental Medicine. (Maruzen Co. Ltd., Export Dept., P.O. Box 5050, Tokyo Int., 100-31 Tokyo, Japan) V.1- 1920- Volume(issue)/page/year 160,97,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	439	mg/kg	1980	Details of toxic effects not reported other than lethal dose value	RPZHAW Roczniki Panstwowego Zakladu Higieny. (Ars Polona, POB 1001, 00-068 Warsaw 1, Poland) V.1- 1950- Volume(issue)/page/year 31,373,1980
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.02	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	30.8	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			
WHODWQ	2	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**4,548**	**44**	**0.97**	**0.006**	**18.6**	**0.17**	**0.68**	**18.6**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	5,360,932	lbs/yr	31	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	221	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	163							ug/L	Pesticide Data Program (USDA) 2001
PDP	285	4	1.4	0.012	0.012			ug/L	Pesticide Data Program (USDA) 2002
PPMP	1		0.4					ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 9060(HPLS)
CAL DHS	20	0	0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 45.29				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	29.4	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.25	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.33E-09	atm-m^3/mol		
Water Solubility	630	mg/L		
% water PBT profiler	17			

Contaminant	m-Cresol
Substance Key:	4686
Contaminant ID (CASRN):	108394

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	8	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.05**	**mg/kg-d**		**Decreased body weights & neurotoxicity**	**Reference Dose, U.S. EPA, 1986, 1987, NOAEL, rat, UF=1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.05	mg/kg-d		Decreased weight and neurotoxicity	Reference Dose, U.S. EPA, 1987, NOAEL/LOAEL, rat, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	300	mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1,500	mg/kg-d		Brain and Coverings - changes in brain weight, Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight	Lowest Observed Adverse Effect Level; 28-day oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB92-174242
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	2,007	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	350	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	2,547	lbs/yr	3	States	2004	
TRI Release - total	**374,903**	**lbs/yr**	**15**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>10M-50M	lbs/yr	2002

Use	Insecticide; disinfectant; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF/BFA	BF = Biodegrades fast/BFA = biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	434	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.96	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.56E-07	atm-m^3/mol		
Water Solubility	22,700	mg/L		
% water PBT profiler				

Contaminant	m-Dichlorobenzene
Substance Key:	7698
Contaminant ID (CASRN):	541731

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	4	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 70

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	**0.09**	**mg/kg-d**		**Hepatic necrosis, porphyria**	**Reference Dose**
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL	0.03	mg/kg-d			Minimal Risk Level; Int
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	37	mg/kg-d	1995	Endocrine - other changes, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - dehydrogenases	Lowest Observed Adverse Effect Level; 90-day oral study in rat; DCTODJ Drug and Chemical Toxicology. (Marcel Dekker, 270 Madison Ave., New York, NY 10016) V.1- 1977/78- Volume(issue)/page/year 18,201,1995
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	3	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	630	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	20,429	51	0.25	0.03	22.4	**1.1**	9.1	22	ug/L	
NCOD Round 2 finished water	24,119	62	**0.26**	0.1	15	0.6	2.8	15	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,353	29	0.67	0.001	0.1	0.017	0.06	0.1	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	377	lbs/yr	3	States	2004	
TRI Release - total	1,939	lbs/yr	6	States	2004	

Supplemental Water Data	# PWSs/Sites/Samples	# with Detects	% PWSs/Sites/Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,938	1	0.01	0.64	0.64	0.64	0.64	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 70	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
		lbs/yr	2002			

Use	Fumigant/insecticide; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	434	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.53	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00264	atm-m^3/mol		
Water Solubility	125	mg/L		
% water PBT profiler	14			

Contaminant	Melamine
Substance Key:	4717
Contaminant ID (CASRN):	108781

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	8	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**178**	**mg/kg-d**	**1983**	**Kidney, Ureter, Bladder chronic inflamation in females; nephropathy- other changes at both doses - suvival decreased at high dose (males) - Cancer positive for males rats and negative for female rats and mice**	**Supplemental Data, NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-245,1983**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999	Vol 73	
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	415	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Chemical intermediate; in resins; leather tanning (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.37	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.80E-14	atm-m^3/mol		
Water Solubility	3,240	mg/L		
% water PBT profiler	**46**			

Contaminant	Mepiquat chloride
Substance Key:	27927
Contaminant ID (CASRN):	24307264

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	9	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.6**	**mg/kg-d**		**Impaired neurological function; vacuolization of the renal distal tubules; increased hemosiderin functions**	**Reference Dose**
EPA IRIS (ITER) RfD	0.03	mg/kg-d	1988		Reference Dose; BASF Wyandotte Chemical 1977a; Basis NOEL 25 mg/kg-d, dog, UF=1000
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.03	mg/kg-d		Sedation & tonoclonic spasms, dec food intake & body wt	Reference Dose, BASF WyandotteChemical 1977, NOEL/LEL, dog, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	75	mg/kg-d	1992	Blood - other changes, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 13-week oral study in dog; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 17,S269,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	464	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C241,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4,200	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**182,576**	**lbs/yr**	**16**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Plant growth regulator (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	174	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.82	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.31E-12	atm-m^3/mol		
Water Solubility	500,000	mg/L		
% water PBT profiler	39			

Contaminant	Mercaptoacetic acid
Substance Key:	2522
Contaminant ID (CASRN):	68111

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	6	8

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**114**	**mg/kg**		**Details of toxic effects not reported other than lethal dose value**	**ZHYGAM Zeitschrift fuer die Gesamte Hygiene und Ihre Grenzgebiete. (VEB Verlag Volk und Gesundheit, Neue Gruenstr. 18, Berlin DDR-1020, Ger. Dem. Rep.) V.1- 1955- Volume(issue)/page/year 20,575,1974**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Chemical intermediate; electroplating; plasticizer (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	27	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.09	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.90E-08	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**36**			

Contaminant	Merphos
Substance Key:	6275
Contaminant ID (CASRN):	150505

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	6	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/CAL DHS 90%: 0.05

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.00003**	**mg/kg-d**	**1988**	**Ataxia, delayed neurotoxicity & weight loss**	**Reference Dose, Abou-Donia et al., 1980; Basis NOEL 0.1 mg/kg-d, hen, UF=3000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.00003	mg/kg-d		ataxia, delayed neurotoxicity, weight loss	Reference Dose, Abou-Donia et al., 1980 , NOEL/LOAEL, hen, UF=3000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	170	mg/kg	1962	Details of toxic effects not reported other than lethal dose value	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 27(8),97,1962
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.21	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	9	lbs/yr	1	States	2004	
TRI Release - total	**12**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	94	2	2.13	1.5	4.3	2.9	4.02	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 0.05				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			
Use	Cancelled herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	8.7 days	length of time	BFA	BFA = Biodegrades fast with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	62,400	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	7.67	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.27E-05	atm-m^3/mol		
Water Solubility	0.0035	mg/L		
% water PBT profiler	6			

Contaminant	Methacrylamide
Substance Key:	2883
Contaminant ID (CASRN):	79390

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**12.5**	**mg/kg-d**		**Decreased body weight**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	451	mg/kg	1981	Details of toxic effects not reported other than lethal dose value	ARTODN Archives of Toxicology. (Springer-Verlag, Heidelberger Pl. 3, D-1000 Berlin 33, Fed. Rep. Ger.) V.32- 1974- Volume(issue)/page/year 47,179,1981
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	87.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Polymer intermediate (OECD/SIDS)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**40**			

Contaminant	Methacrylic acid
Substance Key:	2885
Contaminant ID (CASRN):	79414

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**5**	**mg/kg-d**	**1973**	**Behavioral - alteration of classical conditioning**	**Lowest Observed Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 38(8),13,1973**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,060	mg/kg	1976	Details of toxic effects not reported other than lethal dose value	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 41(4),6,1976
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	11.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Polymer intermediate for resins and coatings (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	15	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.93	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.90E-07	atm-m^3/mol		
Water Solubility	89,000	mg/L		
% water PBT profiler	**40**			

Contaminant	Methacrylonitrile
Substance Key:	5635
Contaminant ID (CASRN):	126987

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0001**	**mg/kg-d**		**Transient increase in SGOT & SGPT (liver enzyme) levels; liver enzyme changes**	**Reference Dose, Pozzani et al., 1968, NOAEL 9 mg/m^3. Dog, UF=3000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.001	mg/kg-d		increased SGOT and SGPT levels	Reference Dose, Pozzani, 1968, NOAEL/LOAEL,dog, UF=3000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	7.5	mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	60	mg/kg-d		Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 90-day oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB97-176390
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	64	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**2,603**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	89,330	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-500M	lbs/yr	1998			
	>10M-500M	lbs/yr	2002			

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	12.8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.68	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.47E-04	atm-m^3/mol		
Water Solubility	25,400	mg/L		
% water PBT profiler	49			

Contaminant	Methional
Substance Key:	14647
Contaminant ID (CASRN):	3268493

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,580**	**mg/kg**	**2000**	**Sense Organs and Special Senses (Eye) - lacrimation, Lungs, Thorax, or Respiration - dyspnea, Lungs, Thorax, or Respiration - other changes**	**VHTODE Veterinary and Human Toxicology. (American College of Veterinary and Comparative Toxicology, Publication Office, Comparative Toxicology, Manhattan, KS 66506) V.19- 1977- Volume(issue)/page/year 42,77,2000. LD50 of 1.52 mL/kg converted to mg/kg using a density of 1.041 g/mL (Aldrich Chemical).**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			
Use	Natural flavoring agent; (American Chemical Society/C&E News)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**47**			

Contaminant	Methomyl
Substance Key:	25598
Contaminant ID (CASRN):	16752775

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	2	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R2 90%: 106

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.025**	**mg/kg-d**		**Histopathological effects in the kidney**	**Reference Dose**
EPA IRIS (ITER) RfD	0.025	mg/kg-d		kidney, spleen	Reference Dose, duPont 1968, NOEL 2.5 mg/kg-d, dog, UF=100
EPA HA RfD	0.025	mg/kg-d			Reference Dose
RAISHE RfD	0.025	mg/kg-d		kidney, spleen	Reference Dose, duPont 1968, NOEL/LEL, dog, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d	2001		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.1	mg/kg-d	1989	Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 90-day oral study in rat; JDGRAX Journal of Drug Research. (National Organization for Drug Research and Control, POB 29, Cairo, Egypt) V.2- 1969- Volume(issue)/page/year 18,145,1989
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	E		1988		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.9				Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	175	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**12,659**	**18**	**0.1422**	**Not Detected**	**3**	**1.65**	**1.65**	**3**	**ug/L**	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,506	17	0.377	0.0044	1.0	0.22	0.47	1.0	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	1,997,489	lbs/yr	42	States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	134								2001
PDP	495								2002
PPMP		0	0						9060 (HPLC/MS)

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	4,611	1	0.02	15	15	15	15	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R2 90%)	Non-cancer: 106	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	5 days	length of time	BF	BF = Biodegrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	12.01	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.6	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.97E-11	atm-m^3/mol		
Water Solubility	58,000	mg/L		
% water PBT profiler				

Contaminant:	Methotrexate
Substance Key:	2369
Contaminant ID (CASRN):	59052

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calcuating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.1**	**mg/kg-d**	**1991**	**Liver - hepatitis (hepatocellular necrosis), zonal**	**Lowest Observed Adverse Effect Level; HPTLD9 Hepatology (Baltimore). (Williams & Wilkins Co., Waverly Press, 428 E. Preston St., Baltimore, MD 21202) V.1- 1981- Volume(issue)/page/year 14,906,1991; 6-week study in rat**
Supplemental LOAEL	0.00435	mg/kg-d			
Supplemental LOAEL	0.5	mg/kg-d			Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50	180	mg/kg	1981		IARC. Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. Geneva: World Health Organization, International Agency for Research on Cancer, 1972-PRESENT. (Multivolume work)., p. V26 275 (1981); Study in rat
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	135	mg/kg	1982		Lowest Observed Adverse Effect Level; NIIRDN Drugs in Japan (Ethical Drugs). (Yakugyo Jiho Co., Ltd., Tokyo, Japan) Volume(issue)/page/year 6,841,1982; Oral study in rat
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental; Teratogen	CACART; UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.23	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water	**26**	**0**	**0**	**Not detected**	**Not detected**	**Not detected**	**Not detected**	**Not detected**	**ug/L**	**National Reconnaissance**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWS/Sites/ Samples	# with Detects	% PWS/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
Focazio, et al., 2008				Not detected	Not detected	Not detected	Not detected	ug/L	Raw drinking water monitoring; Focazio, et al, 2008. *Sci. Tot. Env*., 402(2-3): 201-216.

HRL Ratios (No data for calcuating HRL ratio)	Non-cancer:			Cancer:					

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pharmaceutical			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	38	days	BSA	BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	1	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.85	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-31	atm-m^3/mol		
Water Solubility	2,600	mg/L		
% water PBT profiler	46			

Contaminant	Methyl acetate
Substance Key:	2868
Contaminant ID (CASRN):	79209

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	10	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**1**	**mg/kg-d**		**Increased alkaline phosphatase; liver**	**Reference Dose, U.S. EPA 1986, NOEL, Increased alkaline phosphatase, rat, UF=1000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,705	mg/kg	1972	Details of toxic effects not reported other than lethal dose value	Rabbit; IMSUAI Industrial Medicine and Surgery. (Northbrook, IL) V.18-42, 1949-73. For publisher information, see IOHSA5. Volume(issue)/page/year 41,31,1972
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; food additive; industrial solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**3.32**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.18	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000115	atm-m^3/mol		
Water Solubility	243,000	mg/L		
% water PBT profiler				

Contaminant	Methyl acrylate
Substance Key:	3829
Contaminant ID (CASRN):	96333

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	1	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.03**	**mg/kg-d**		**None observed**	**Reference Dose, U.S. EPA, 1987, NOEL, rat, UF=100**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	149	mg/kg-d	1964	Behavioral - fluid intake, Kidney, Ureter, Bladder - changes in bladder weight, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 2-year oral study in rat; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 6,29,1964
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1990		
IARC Carcinogen Classification	3		1999		Vol. 39, Suppl. 7; Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**2,603**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	728	lbs/yr	5	States	2004	
TRI Release - total	206,487	lbs/yr	20	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			
Use	Polymer intermediate; in adhesive formulations (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	6.42	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000197	atm-m^3/mol		
Water Solubility	49,400	mg/L		
% water PBT profiler				

Contaminant	Methyl carbamate
Substance Key:	8351
Contaminant ID (CASRN):	598550

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	8	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**71.4**	**mg/kg-d**		**Blood - leukemia, Tumorigenic - active as anti-cancer agent**	**Lowest Observed Adverse Effect Level, NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB88-168570/AS**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1987		Vol. 12, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	167	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>1M-10M	**lbs/yr**	**2002**

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	10	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.00E-08	atm-m^3/mol		
Water Solubility	691,000	mg/L		
% water PBT profiler	**40**			

Contaminant	Methyl mercaptan
Substance Key:	2609
Contaminant ID (CASRN):	74931

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	10	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**61**	**mg/kg**	**2001**		**Bingham, E.; Cohrssen, B.; Powell, C.H.; Patty's Toxicology Volumes 1-9 5th ed. John Wiley & Sons. New York, N.Y. (2001)., p. 688**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>100M-500M	lbs/yr	1998						
	>1B	**lbs/yr**	**2002**						

Use	Chemical intermediate; natural gas additive (HSDB); gas			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**14.3**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.13E-03	atm-m^3/mol		
Water Solubility	15,400	mg/L		
% water PBT profiler	75			

Contaminant	Methyl methacrylate
Substance Key:	2958
Contaminant ID (CASRN):	80626

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	1	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**1.4**	**mg/kg-d**		**None. Marginally significant increase in kidney to body weight ratio. Decreased Potency Score by one integer**	**Borzelleca et al., 1964, NOEL 136 mg/kg-d, rat, UF=100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	1.4	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.05	mg/kg-d	1992	kidney	Tolerable Daily Intake, Borzelleca et al., 1964, NOEL, rat, UF=100
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.357	mg/kg-d	1976	Brain and Coverings - other degenerative changes, Liver - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; 39-week oral study in rabbit; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 41(4),6,1976
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	E		1997		
IARC Carcinogen Classification	3		1994		Vol. 60
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	9,800	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**2,603**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	2,408	lbs/yr	8	States	2004	
TRI Release - total	3,657,567	lbs/yr	39	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No data for calculating HRL ratio)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	lbs/yr	2002			
Use	Polymer intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	10.14	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000338	atm-m^3/mol		
Water Solubility	15,000	mg/L		
% water PBT profiler				

Contaminant	Methylamine
Substance Key:	2607
Contaminant ID (CASRN):	74895

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	7	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**100**	**mg/kg**	**1990**	**Details of toxic effects not reported other than lethal dose value**	**INHTE5 Inhalation Toxicology. (Published by Taylor & Francis Health, 11 New Fetter Lane, London EC4P 4EE) V.1- 1989- Volume(issue)/page/year 2,29,1990**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Intermediate for accelerators, dyes, pharmaceuticals, insecticides, tanning; fuel additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	389	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.57	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.11E-05	atm-m^3/mol		
Water Solubility	1,250,000	mg/L		
% water PBT profiler	**48**			

Contaminant	Methylcyclopentadienyl manganese tricarbonyl
Substance Key:	22045
Contaminant ID (CASRN):	12108133

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	5	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**207**	**mg/kg-d**	**1992**	**Kidney, Ureter, Bladder - other changes in urine composition, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect Level, AECTCV Archives of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 070944) V.1- 1973- Volume(issue)/page/year 23,473,1992**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	8	mg/kg	1976	Details of toxic effects not reported other than lethal dose value	TMMT "The Toxicology of Methylcyclopentadienyl Manganese Tricarbonyl," Witherup, S., et al., Cincinnati, OH, Univ. of Cincinnati, 1976 Volume(issue)/page/year -,-,1976
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	482	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Fuel additive (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	29	mg/L		
% water PBT profiler				

Contaminant	Methyleugenol
Substance Key:	3608
Contaminant ID (CASRN):	93152

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	3

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**10**	**mg/kg-d**	**2001**	**Increased liver weights, decreased body weight gain**	**Supplemental NOEL, Abdo, et al. 2001. Food and Chemical Toxicology 39 (2001) 303-316.**
RTECS Lowest Oral Chronic LOAEL	0.0714	mg/kg-d	2001	Endocrine - changes in spleen weight, Blood - changes in platelet count, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; 14-week oral study in rat; FCTOD7 Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982- Volume(issue)/page/year 39,303,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>10K-500K	lbs/yr	1998
	>10K-500K	**lbs/yr**	**2002**

Use	Former pesticide; flavorant; insect attractant (HSDB)

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**34 hours**	**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	140	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.60E-06	atm-m^3/mol		
Water Solubility	500	mg/L		
% water PBT profiler	**19**			

Contaminant	Methylglutaronitrile
Substance Key:	16055
Contaminant ID (CASRN):	4553622

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	6	7

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**10**	**mg/kg**	**1969**	**Behavioral - convulsions or effect on seizure threshold, Behavioral - excitement, Lungs, Thorax, or Respiration - cyanosis.**	**ZAARAM Zentralblatt fuer Arbeitsmedizin und Arbeitsschutz. (Darmstadt, Fed. Rep. Ger.) V.1-25, 1951-75. Volume(issue)/page/year 19,225,1969**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Chemical intermediate; solvent (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	10.7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.644	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	Methyltrichlorosilane
Substance Key:	2682
Contaminant ID (CASRN):	75796

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	8	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**800**	**mg/kg**	**1981-1982**	**Details of toxic effects not reported other than lethal dose value**	**Clayton, G. D. and F. E. Clayton (eds.). Pattys Industrial Hygiene and Toxicology: Volume 2A, 2B, 2C: Toxicology. 3rd ed. New York: John Wiley Sons, 1981-1982., p. 2398**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	50M-10M	lbs/yr	1998			
	100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**rapid**	**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**40**			

Contaminant	Metiram
Substance Key:	20233
Contaminant ID (CASRN):	9006422

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	9	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.004**	**mg/kg-d**		**Decrease forelimb grip strength**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.03	mg/kg-d	1993		Acceptable Daily Intake, Group ADI with MANCOZED, MANEB AND ZINEB
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	73.9	mg/kg-d	2000	Endocrine - changes in thyroid weight, Blood - changes in erythrocyte (RBC) count, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 13-week oral study in rat; TOSCF2 Toxicological Sciences (Oxford University Press, 6277 Sea Harbor Drive, Orlando, FL 32887) V. 41, Jan. 1998- Volume(issue)/page/year 54,481,2000
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	620	mg/kg	1980	Details of toxic effects not reported other than lethal dose value	VETNAL Veterinariya. Veterinary Science. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1924- Volume(issue)/page/year 56(6),59,1980
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,385,330**	**lbs/yr**	**24**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data									
OPP Estimated Environmental Concentration		Surface water chronic: 0 ug/L				Ground water chronic: 0 ug/L			
HRL Ratios (No data for calculating HRL ratio)		Non-cancer:				Cancer:			

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Fungicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF	BF = Biodegrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	100,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.30E-18	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Metribuzin
Substance Key:	27143
Contaminant ID (CASRN):	21087649

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	1	7

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 45.5

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.013**	**mg/kg-d**		**Increased absolute & relative thyroid weight, increased T4, decreased T3 in blood.**	**Reference Dose, Mobay Chemical, 1974a**
EPA IRIS (ITER) RfD	0.025	mg/kg-d		Liver; kidney; body weight; mortality	Reference Dose, Mobay Chemical, 1974a, NOEL 2.5 mg/kg-d, dog, UF=100
EPA HA RfD	0.025	mg/kg-d			Reference Dose
RAISHE RfD	0.025	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.617	mg/kg-d	1990	Brain and Coverings - other degenerative changes	Lowest Observed Adverse Effect Level; 15-week oral study in rat; JTEHD6 Journal of Toxicology and Environmental Health. (Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005) V.1-1975/76- Volume(issue)/page/year 30,209,1990
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.9				Drinking Water Equivalent Level
CADW MAC	80	µg/L			Canadian Drinking Water Maximum Acceptable Concentration
Health Reference Level (HRL)[2]	91	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water	**13,568**	**9**	**0.0663**	**0.1**	**2**	**1.1**	**2**	**2**	**ug/L**	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,165	459	6.41	0.002	6.61	0.022	0.24	2.26	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	3,320,231	lbs/yr	48	States	1997	
TRI Release - surface water	24	lbs/yr	2	States	2004	
TRI Release - total	847	lbs/yr	3	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	288	1	0.3	0.042	0.042	0.042	0.042	ug/L	2001
PDP	582							ug/L	2002

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PPMP		47	14.6				0.004	ug/L	2001 raw water (GC/MS)
PPMP		0	0					ug/L	2001 finished water (GC/MS)

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,281	1	0.01	4	4	4	4	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 45.5	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1,196	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.7	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.17E-10	atm-m^3/mol		
Water Solubility	1,050	mg/L		
% water PBT profiler				

Contaminant	Molybdenum trioxide
Substance Key:	11108
Contaminant ID (CASRN):	1313275

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	9	8
Scores based on parent		Scores based on parent	

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 1.10

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.005**	**mg/kg-d**		**Increased uric acid levels (for molybdenum)**	**Reference Dose, U.S. EPA, 2003**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**77**	**7.79**	**6.1**	**180**	**10**	**30**	**110**	**ug/L**	**Scores based on parent (molybdenum)**
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	36,579	lbs/yr	18	States	2004	
TRI Release - total	2,102,324	lbs/yr	36	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (HRL/NIRS 90%)	Non-cancer: 1.10				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	10M-50M	lbs/yr	1986			
		lbs/yr	2002			
Use	Catalyst; chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,066	mg/L		
% water PBT profiler				

Contaminant	N,N'-Diethylthiourea
Substance Key:	4461
Contaminant ID (CASRN):	105555

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	1	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**316**	**mg/kg**	**1973**	**Details of toxic effects not reported other than lethal dose value**	**(NCILB Progress Report for Contract No. NIH-NCI-E-C-72-3252, Submitted to the National Cancer Institute by Litton Bionetics, Inc. (Bethesda, MD) Volume(issue)/page/year NCI-E-C-72-3252,1973)**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				Vol 79; 2001
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	10K - 500K	lbs/yr	1998						
	10K - 500K	**lbs/yr**	**2002**						
Use	Rubber accelerator; corrosion inhibitor (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	49	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.57	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.85E-08	atm-m^3/mol		
Water Solubility	4,555	mg/L		
% water PBT profiler	**47**			

Contaminant	N,N-Dimethylacetamide
Substance Key:	5644
Contaminant ID (CASRN):	127195

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	0.583	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**65**	**mg/kg-d**		**decreased fetal body weights in the absence of maternal toxicity**	**Supplemental Data, Johannsen et al 1987**
RTECS Lowest Oral Chronic LOAEL	2	mg/kg-d	1980	Liver - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - other esterases, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; 26 week rat study
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	4,390	mg/kg			Kennedy, GL Jr, Sherman H; Drug Chem Toxicol 9 (2): 147-70 (1986); Prager, J.C. Environmental Contaminant Reference Databook, Volume 1. New York, NY: Van Nostrand Reinhold; rat
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	455	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			
Use	Industrial solvent (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	9	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.77	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.31E-08	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**40**			

Contaminant	N,N-Dimethylethanolamine
Substance Key:	4658
Contaminant ID (CASRN):	108010

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	7	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**450**	**mg/kg-d**		**increased liver and kidney weights**	**Supplemental Data, NTP summary of tox literature. NOAEL 450 mg/kg/day (Smyth et al, 1951**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	15	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,150	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									u	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:	
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			
Use	Medication; chemical intermediate; stabilizer (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.73E-07	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**40**			

Contaminant	Naled
Substance Key:	6448
Contaminant ID (CASRN):	300765

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	9	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 25

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.002**	**mg/kg-d**		**Brain ChE inhibition**	**Reference Dose**
EPA IRIS (ITER) RfD	0.002	mg/kg-d		Brain cholinesterase inhibition	Reference Dose, Chevron Chemical Co., 1984a, NOEL 0.2 mg/kg-d, rat, UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d		ChE inhibintion	Reference Dose, Chevron Chemical Co., 1984a, NOEL/LEL, rat, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	21.4	mg/kg-d	1969	Nutritional and Gross Metabolic - body temperature decrease, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 9-week oral study in rat; RPZHAW Roczniki Panstwowego Zakladu Higieny. (Ars Polona, POB 1001, 00-068 Warsaw 1, Poland) V.1- 1950- Volume(issue)/page/year 20,463,1969
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	92	mg/kg	1990	Behavioral - tremor, Gastrointestinal - changes in structure or function of salivary glands, Gastrointestinal - hypermotility, diarrhea	Rat; ATDAEI Acute Toxicity Data. Journal of the American College of Toxicology, Part B. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1- 1990- Volume(issue)/page/year 1,90,1990
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**605,456**	**lbs/yr**	**16**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	14	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

OPP Estimated Environmental Concentration	Surface water chronic: 0.56 ug/L	Ground water chronic: 0.005 ug/L	
HRL Ratios (HRL/SWC EEC)	Non-cancer: 25	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide; veterinary medicine (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	96.03	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.51E-05	atm-m^3/mol		
Water Solubility	1.5	mg/L		
% water PBT profiler	37			

Contaminant	Naphthalene
Substance Key:	3465
Contaminant ID (CASRN):	91203

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	7	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 17.5

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.02**	**mg/kg-d**		**Decreased terminal body weight**	**Reference Dose, BCL 1980, NOAEL 100 mg/kg-d; adjusted NOAEL 71 mg/kg-d, rat, UF=3000**
EPA HA RfD	0.02	mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d		Decreased mean terminal body weight in males	Reference Dose, BCL 1980, NOAEL/LOAEL, rat, UF=3000
ATSDR (ITER), MRL	0.6	mg/kg-d		Neurol.	Minimal Risk Level-Int.
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	60	mg/kg-d	1970	Endocrine - changes in adrenal weight	Lowest Observed Adverse Effect Level; 28-day oral study in rat; BIOFX BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets. (1810 Frontage Rd., Northbrook, IL 60062) Volume(issue)/page/year 16-4/1970
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C				
IARC Carcinogen Classification	2B				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.7				Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**13,452**	**159**	**1.18**	**0.03**	**906**	**1**	**8**	**900**	**ug/L**	
NCOD Round 2 finished water	22,926	176	0.768	0.07	90	0.736	3.1	73	ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water	4,310	83	1.926	0.005	70	0.072	0.7	43	ug/L	
NREC ambient surface water	85	14	16.5			0.020			ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water			6.31			0.135			ug/L	National Aggregate
NREC ambient ground water			1.35			0.9			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	17,809	lbs/yr	41	States	2004	
TRI Release - total	3,456,696	lbs/yr	53	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples sampled	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	10,913	20	0.18	0.008	7	0.88	4.07	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 17.5	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			

Use	Former pesticide; chemical intermediate; moth repellant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,837	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00044	atm-m^3/mol		
Water Solubility	31	mg/L		
% water PBT profiler	13			

Contaminant	n-Butyl acetate
Substance Key:	5537
Contaminant ID (CASRN):	123864

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**14,000**	**mg/kg**	**1993-1994**	**Paper by Davis et al, suggests that n-butanol data are appropriate for the effects of n-butylacetate since n-butylacetate are readily hydrolyzed to n-butanol. In an inhalation study, there was some minor evidence of gastric irritation from the n-butyl acetate.**	**Clayton, G.D., F.E. Clayton (eds.) Pattys Industrial Hygiene and Toxicology. Volumes 2A, 2B, 2C, 2D, 2E, 2F: Toxicology. 4th ed. New York, NY: John Wiley & Sons Inc., 1993-1994., p. 2980**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate; flavoring additive; industrial solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	200	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00028	atm-m^3/mol		
Water Solubility	14,000	mg/L		
% water PBT profiler	**33**			

Contaminant	n-Butyl methacrylate
Substance Key:	3916
Contaminant ID (CASRN):	97881

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	6	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**30**	**mg/kg-d**		**Spleen toxicity, decreased absolute and relative weights of the spleen.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	3.57	mg/kg-d	1976	Brain and Coverings - recordings from specific areas of CNS, Behavioral - alteration of classical conditioning, Liver - other changes; Blood - pigmented or nucleated red blood cells, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - catalases	Lowest Observed Adverse Effect Level; 39-week oral study in rat and rabbit; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 41(4),6,1976
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	12,900	mg/kg	1976	Details of toxic effects not reported other than lethal dose value	Mouse; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 41(4),6,1976
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Polymer intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**8.7 days**	**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	880	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.88	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00079	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**24**			

Contaminant	Neopentyl glycol
Substance Key:	5606
Contaminant ID (CASRN):	126307

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**100**	**mg/kg-d**		**Increased liver weight; increased kidney weight**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Chemical intermediate (Merck Index, 1983)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**44**			

Contaminant:	Nickel
Substance Key:	18829
Contaminant ID (CASRN):	7440020

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	9	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 0.74

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.02**	**mg/kg-d**	**1995**	**Decreased organ (kidney, liver & spleen) & body weights**	**Reference Dose**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d			Reference Dose; IRIS
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			OEHHA, Class A
EPA Carcinogen classification					
IARC Carcinogen Classification	1		1990		Vol. 49; 1997; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL	0.7	mg/L	1995		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**47**	**4.75**	**5**	**150**	**7.6**	**190**	**110**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water	3,298	2,171	65.8	0.03	666	2	6	29.7	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	29,802	lbs/yr	37	States	2004	
TRI Release - total	6,119,051	lbs/yr	49	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.74			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
		lbs/yr	2002			
Use	Use data are for nickel sulfate: Steel making, catalysts, storage batteries, specialty chemicals, and specialty ceramics (HSDB); naturally-occurring					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assume persistent; all use and env. fate data are for nickel sulfate; BST = biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		cm3/g		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		cm3/g		
HLC, Henry's Law Constant		unitless		
Water Solubility	389,900	mg/L		
% water PBT profiler				

Contaminant	Nickel compounds
Substance Key:	44
Contaminant ID (CASRN):	

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.02**	**mg/kg-d**		**Decreased body and organ weights**	**Reference Dose, Rat chronic oral study, Ambrose et al., 1976**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	1		1990		Vol. 49
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	170,937	lbs/yr	45	States	2004	
TRI Release - total	**34,676,669**	**lbs/yr**	**52**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Electroplating; steel additives (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Niobium
Substance Key:	18830
Contaminant ID (CASRN):	7440031

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**316**	**mg/kg-d**		**hyperplasia and hyperkeratosis of the stomach**	**Supplemental Data, OPPTS summary LOAEL 316 mg/kg/day ammonium niobium dioxylate oxide pentahydrate.**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	8.03E-13	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	22.1	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1986**			
		lbs/yr	2002			
Use	In alloys; in nuclear reactions (Merck Index, 1983)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient	**350**	**L/kg**		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Nitrilotriacetic acid
Substance Key:	5991
Contaminant ID (CASRN):	139139

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	3	6

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	**0.01**	**mg/kg-d**		**Increased incidence of nephritis & nephrosis, hyperglycaemia**	**Supplemental Data, Health Canada ADI**
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.05	mg/kg-d	1979	Kidney, Ureter, Bladder - other changes in urine composition, Kidney, Ureter, Bladder - changes in bladder weight, Nutritional and Gross Metabolic - changes in calcium	Lowest Observed Adverse Effect Level; 4-week oral study in rat; FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 17,137,1979
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.0053	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		Vol. 73
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; OEHHA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
WHODWQ	200	µg/L			World Health Organization Drinking Water Quality Value
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	14,494	lbs/yr	1	States	2004	
TRI Release - total	**30,679**	**lbs/yr**	**3**	**States**	**2004**	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**
CUSIUR Production Data	>500K-1M	lbs/yr	1998
	>10K-500K	lbs/yr	2002
Use	Chelating agent; in detergents (HSDB)		

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	8.7 days	length of time	BF	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	<286	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-3.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	59,100	mg/L		
% water PBT profiler	34			

Contaminant:	Nitrofen
Substance Key:	12291
Contaminant ID (CASRN):	1836755

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	7	1	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**0.17**	**mg/kg-d**	**1983**	**Neonatal effects**	**Supplemental Data; Toxicology Volume 29, Issue 1-2, December 1983, Pages 1-37;**
RTECS Lowest Oral Chronic LOAEL	49.9	mg/kg-d		Liver - changes in liver weight	Lowest Observed Adverse Effect Level; 2-year oral study in mammal; FCTXAV Food and Cosmetics Toxicology. (London, UK) V.1-19, 1963-81. For publisher information, see FCTOD7. Volume(issue)/page/year 10,427,1972
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.082	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.19	µg/L			
Health Reference Level (HRL)[2] cancer	0.427	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2002	
TRI Release - total	**25,300**	**lbs/yr**	**1**	**States**	**2002**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (NTP)					

Environmental Fate Parameters	Value	Units	Degradation code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient	4,400	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.534	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.74 E-05	atm-m^3/mol		
Water Solubility	0.7-1.2	mg/L		
% water PBT profiler	9			

Contaminant	Nitromethane
Substance Key:	2658
Contaminant ID (CASRN):	75525

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	6	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**12.5**	**mg/kg-d**	**1967**	**Behavioral - alteration of classical conditioning, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 32(9),9,1967; 26-week oral study in rabbit**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		2000		Vol. 77
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	29.2	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Rocket fuel; industrial solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	15	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.35	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.86E-05	atm-m^3/mol		
Water Solubility	111,000	mg/L		
% water PBT profiler	**44**			

Contaminant	N-Methylolacrylamide
Substance Key:	10095
Contaminant ID (CASRN):	924425

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	5

3-model Categorical Prediction
NL?-L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**12.5**	**mg/kg-d**	**1989**	**Behavioral - ataxia, Liver - changes in liver weight, Related to Chronic Data - changes in testicular weight**	**Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-352,1989**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1994		Vol. 60
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	29.2	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	1,121	lbs/yr	3	States	2004	
TRI Release - total	**12,306**	**lbs/yr**	**13**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	lbs/yr	2002

Use	Monomer; proposed for use in sunscreen (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.81	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.45E-12	atm-m^3/mol		
Water Solubility	653,000	mg/L		
% water PBT profiler	39			

Contaminant:	N-Nitroso-di-n-butylamine (NDBA)
Substance Key:	10094
Contaminant ID (CASRN):	924163

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0006**	**mg/L**			
RAISHE Slope Factor	5.4	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	11	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1986	Bladder, esophagus	OEHHA incorrectly lists EPA cancer classification as "A."
IARC Carcinogen Classification	2B		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; OEHHA; RAIS; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.006	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**5**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
STORET	131	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Research chemical (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15	days	BS	PBT; BS = Biodegrades Slowly
K_{OC}, Organic Carbon Partition Coefficient	642	cm3/g		
log K_{OW}, Octanol Water Partition Coeff.	2.63	unitless		
Kd, Distribution coefficient		cm3/g		
HLC, Henry's Law Constant	1.32E-05	atm-m^3/mol		
Water Solubility	1,200	mg/L		
% water PBT profiler	26			

Contaminant:	N-Nitrosomethylethylamine (NMEA)
Substance Key:	21341
Contaminant ID (CASRN):	10595956

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	8		

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI					Tolerable Daily Intake
Supplemental RfD-like value					Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.0002**	**mg/L**			**IRIS**
RAISHE Slope Factor	22	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	22	$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2B		1987		
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; RAIS; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.0016	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggragate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units	Notes
STORET	21	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Research chemical (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	days	BSA	PBT; BSA = Biodegrades Slowly with Acclimation
K_{OC}, Organic Carbon Partition Coefficient	25	cm3/g		
log K_{OW}, Octanol Water Partition Coeff.	0.04	unitless		
Kd, Distribution coefficient		cm3/g		
HLC, Henry's Law Constant	1.40E-06	atm-m^3/mol		
Water Solubility	300,000	mg/L		
% water PBT profiler	52			

Contaminant	N-Nitroso-N-methylurea
Substance Key:	9372
Contaminant ID (CASRN):	684935

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
9	8	1	1

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	2.86	mg/kg-d	1999	Musculoskeletal - changes in teeth and supporting structures	Lowest Observed Adverse Effect Level; 16-week oral study in hamster; TOPADD Toxicologic Pathology. (c/o Dr. F.A. de la Iglesia, Warner-Lambert Co., Pharmaceutical Research Div., POB 1047, Ann Arbor, MI 48106) V.6(3/4)- 1978- Volume(issue)/page/year 27,226,1999
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**120**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification	2A		1987		Vol. 17, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			OEHHA; EPA; IARC; CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.000292	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**5**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Synthetic intermediate; potential anti-neoplastic (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	18.55	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.03	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.91E-11	atm-m^3/mol		
Water Solubility	14,400	mg/L		
% water PBT profiler	39			

Contaminant	Norflurazon
Substance Key:	30023
Contaminant ID (CASRN):	27314132

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 84.7

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.015**	**mg/kg-d**		**Increased cholesterol, absolute & relative liver weight**	**Reference Dose**
EPA IRIS (ITER) RfD	0.04	mg/kg-d	1986	Liver; thyroid	Reference Dose; Sandoz-Wander, 1973; Basis NOEL 3.75 mg/kg-d, dog, UF = 100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.04	mg/kg-d		Liver; thyroid	Reference Dose; Sandoz-Wander, 1973; Basis NOEL/LEL, dog, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	8,000	mg/kg	1977	Details of toxic effects not reported other than lethal dose value	Rat; 85ARAE "Agricultural Chemicals," Thomson, W.T., 4 vols., Fresno, CA, Thomson Publications, 1976/7
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	105	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**4,557**	**71**	**1.56**	**0.004**	**44**	**0.21**	**1.24**	**26.5**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	2,459,703	lbs/yr	30	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWS/Sites/ Samples	# with Detects	% PWS/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP finished water	154							ug/L	Pesticide Data Program (USDA) 2001
PDP finished water	288							ug/L	Pesticide Data Program (USDA) 2002
PPMP finished water		0	0		Not Detected			ug/L	Pesticide Pilot Monitoring Program (USGS/EPA)

HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 84.7				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	5,674	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.43E-10	atm-m^3/mol		
Water Solubility	33.7	mg/L		
% water PBT profiler	17			

Contaminant	o-Chloronitrobenzene
Substance Key:	3327
Contaminant ID (CASRN):	88733

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.001**	**mg/kg-d**		**methemoglobinemia**	**Reference Dose; Bio/Dynamics, Inc. 1985; Basis NOAEL, rat, UF=100**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	88.9	mg/kg-d		Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 27-week oral study in mouse; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year PB92-187608/AS
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.0097	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1996		Vol 65
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>50M-100M	lbs/yr	1998							
	>10M-50M	**lbs/yr**	**2002**							
Use	Chemical intermediate (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**						
K_{OC}, Organic Carbon Partition Coefficient	**315.5**	**L/kg**								
log K_{OW}, Octanol Water Partition Coeff.	2.24	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	9.30E-06	atm-m^3/mol								
Water Solubility	441	mg/L								
% water PBT profiler										

Contaminant	o-Chlorotoluene
Substance Key:	3764
Contaminant ID (CASRN):	95498

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	3	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R2 90%: 46.7

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.02**	**mg/kg-d**	**1990**	**Decreased body weight gain**	**Reference Dose; Gibson et al., 1974a Basis NOAEL 20 mg/kg-d, rat, UF=1000**
EPA HA RfD	0.02	mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d		Decreased body weight gain	Reference Dose; Gibson et al., 1974a Basis NOAEL/LOAEL 20 mg/kg-d, rat, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	570	mg/kg-d	1981	Liver - liver function tests impaired, Kidney, Ureter, Bladder - renal function tests depressed, Blood - other changes	Lowest Observed Adverse Effect Level; 9-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 46(2),67,1981
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.7	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	15,721	32	**0.204**	0.06	16.4	0.57	3	16.4	ug/L	
NCOD Round 2 finished water	24,118	34	0.141	0.3	52.4	**0.68**	4.4	52.4	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	19	0.441	0.004	0.356	0.0195	0.05	0.356	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWS/Sites/ Samples	# with Detects	% PWS/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,883	6	0.05	0.6	24	7.9	17.5	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R2 90%)	Non-cancer: 46.7	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	10K-500K	lbs/yr	2002			

Use	Solvent; chemical intermediate; insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = Biodegrades slow (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	443	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.42	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00357	atm-m^3/mol		
Water Solubility	374	mg/L		
% water PBT profiler				

Contaminant	Octamethylcyclotetrasiloxane
Substance Key:	7887
Contaminant ID (CASRN):	556672

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	5

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,540**	**mg/kg**		**Behavioral - tremor**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0538262**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	108	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chemical intermediate; in PPCPs; food additive; in fermentation (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	14,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.1	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.117	atm-m^3/mol		
Water Solubility	0.005	mg/L		
% water PBT profiler	**10**			

Contaminant	o-Dianisidine dihydrochloride
Substance Key:	26927
Contaminant ID (CASRN):	20325400

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**33**	**mg/kg-d**		**Blood - other changes, Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight**	**Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-372,1990. 39 week study in rat.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	77	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	29	lbs/yr	1	States	2004	
TRI Release - total	**46**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>500K-1M	lbs/yr	1998						
	10K-500K	lbs/yr	2002						
Use	Biochemical reagent (SigmaAldrich - manufacturer)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	44			

Contaminant	o-Dinitrobenzene
Substance Key:	7498
Contaminant ID (CASRN):	528290

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.0001**	**mg/kg-d**		**Increased spleen weight**	**Reference Dose; Cody et al. 1981; Basis NOAEL, rat, UF=3000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1992		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Reproductive	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	102,329	lbs/yr	1	States	2004	
TRI Release - total	**105,280**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = Biodegrades slow (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	225	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.69	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.69E-07	atm-m^3/mol		
Water Solubility	500	mg/L		
% water PBT profiler				

Contaminant	o-Nitrotoluene
Substance Key:	3326
Contaminant ID (CASRN):	88722

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	6	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.01	mg/kg-d	1986	Blood- elevated methemoglobin, anemia. Spleen- splenic hemosiderosis, splenomegaly, splenic histopathology	Reference Dose; USEPA 1986; Basis LOAEL, rat, UF=10000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	37.5	mg/kg-d	2003	Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 15-week oral study in rat; TXCYAC Toxicology. (Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick, Ireland) V.1- 1973- Volume(issue)/page/year 183,221,2003
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.23**	**$(mg/kg\text{-}d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1996		Vol. 65
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	70	µg/L			
Health Reference Level (HRL)[2] cancer	0.15	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Chemical intermediate for petrochemicals, pesticides, dyes and pharmaceuticals. □(HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**315.5**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.3	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.25E-05	atm-m^3/mol		
Water Solubility	650	mg/L		
% water PBT profiler				

Contaminant	o-Toluidine hydrochloride
Substance Key:	9161
Contaminant ID (CASRN):	636215

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	2	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	300	mg/kg-d		Liver - other changes, Liver - changes in liver weight, Related to Chronic Data - changes in testicular weight; Kidney, Ureter, Bladder - changes in bladder weight, Endocrine - changes in spleen weight, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 26-week and 13-week oral study in rat; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206-Volume(issue)/page/year NIH-96-3936
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	0.18	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.13**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAISHE; OEHHA; EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer	0.27	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**22**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Dye intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	74.04	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.32	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.98E-06	atm-m^3/mol		
Water Solubility	16,600	mg/L		
% water PBT profiler	41			

Contaminant	Oxadiazon
Substance Key:	26706
Contaminant ID (CASRN):	19666309

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	0.0036	mg/kg-d		Increased level of serum protein increased liver weight, incidence of swollen cells in central lobe of the liver.	Reference Dose; OPP
EPA IRIS (ITER) RfD	0.005	mg/kg-d	1987	Incr. serum proteins; incr. liver weights	Reference Dose; Rhone-Poulenc, 1981; Basis NOEL 0.5 mg/kg-d, rat, UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.005	mg/kg-d		Increased levels of serum protein and increased liver weight	Reference Dose; Rhone-Poulenc, 1981; Basis NOEL/LEL, rat, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor	**0.0711**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Reproductive	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	25.2	µg/L			
Health Reference Level (HRL)[2] cancer	0.49	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**28,822**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWS/Sites/ Samples	# with Detects	% PWS/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	154							ug/L	Pesticide Data Program (USDA) 2001
PDP	317							ug/L	Pesticide Data Program (USDA) 2002

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:			Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS	BS = Biodegrades slow (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	3,500	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.27E-08	atm-m^3/mol		
Water Solubility	0.7	mg/L		
% water PBT profiler				

Contaminant	Ozone
Substance Key:	20667
Contaminant ID (CASRN):	10028156

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		9	8

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**715,830**	**lbs/yr**	**20**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Air and water disinfectant; chemical intermediate (HSDB); Naturally-occurring gas					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	p,p'-DDE
Substance Key:	2587
Contaminant ID (CASRN):	72559

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
NC HRL/UCMR 90%: 0.03

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.02	mg/kg-d	1984		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.0005	mg/kg-d	2000		Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	12	mg/kg-d	1996	Liver - changes in liver weight, Immunological Including Allergic - decrease in cellular immune response, Immunological Including Allergic - decrease in humoral immune response	Lowest Observed Adverse Effect Level; 6-week oral study in rat
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	**0.01**	**mg/L**			**IRIS**
RAISHE Slope Factor	0.34	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	0.34	$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2		1988		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; EPA; RAISHE; OEHHA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.1	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**3,867**	**1**	**0.0259**	**3**	**3**	**3**	**3**	**3**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,117	457	6.42	0.001	0.062	0.002	0.0095	0.025	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS	2,672	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
PDP	288							ug/L	Pesticide Data Program (USDA) 2001
PDP	688							ug/L	Pesticide Data Program (USDA) 2002
PPMP		6	2.6		0.006			ug/L	Pesticide Pilot Monitoring Prgram (USGS/EPA) 2001(GC/MS)

HRL Ratios (HRL/UCMR 90%)	Non-cancer: 0.03	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Product of degradation of DDT (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	153,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	6.51	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.16E-05	atm-m^3/mol		
Water Solubility	0.04	mg/L		
% water PBT profiler	1			

Contaminant	Paraquat
Substance Key:	16146
Contaminant ID (CASRN):	4685147

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	10	8

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.0045**	**mg/kg-d**		**Lungs, Thorax, or Respiration - other changes, chronic pneumonitis**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.004	mg/kg-d	1986		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.93	mg/kg-d	2001	Lungs, Thorax, or Respiration - other changes	Lowest Observed Adverse Effect Level; 1-year oral study in dog; FEREAC Federal Register. (U.S. Government Printing Office, Supt. of Documents, Washington, DC 20402) V.1- 1936- Volume(issue)/page/year 66,48593,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	25	mg/kg	1979		IYKEDH Iyakuhin Kenkyu. Study of Medical Supplies. (Nippon Koteisho Kyokai, 12-15, 2-chome, Shibuya, Shibuya-ku, Tokyo 150, Japan) V.1- 1970- Volume(issue)/page/year 10,520,1979
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	31.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**6,884,630**	**lbs/yr**	**48**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS	519	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Former herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	15,473-1,000,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-4.22	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	<1E-09	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	46			

Contaminant	p-Chloronitrobenzene
Substance Key:	4072
Contaminant ID (CASRN):	100005

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	6	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**0.177**	**mg/kg-d**	**2006**	**Decreased red blood cell count**	**Supplemental Data; Journal; Matsumoto et al., 2006 BMDL10=0.177 mg/kg/day**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1996		Vol. 65
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.41	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M - 100M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	151-476	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.39	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	453	mg/L		
% water PBT profiler	**22**			

Contaminant	p-Chlorotoluene
Substance Key:	4533
Contaminant ID (CASRN):	106434

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	3	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 70

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD	**0.02**	**mg/kg-d**		**Decreased body weight gain.**	**Reference Dose IRIS**
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1	mg/kg-d	1981	Brain and Coverings - recordings from specific areas of CNS, Liver - hepatitis (hepatocellular necrosis), zonal, Liver - liver function tests impaired	Lowest Observed Adverse Effect Level; 26-week oral study in rat
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.7	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**15,612**	**27**	**0.173**	**0.02**	**6.4**	**0.5**	**2**	**6.4**	**ug/L**	
NCOD Round 2 finished water	21,378	25	0.117	0.2	22.5	0.5	5	22.5	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	0	0	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,879	2	0.02	0.4	3	1.7	2.74	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 70	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>500K-1M	lbs/yr	2002			

Use	Solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	340	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.33	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0044	atm-m^3/mol		
Water Solubility	106	mg/L		
% water PBT profiler	20			

Contaminant	p-Cresidine
Substance Key:	5344
Contaminant ID (CASRN):	120718

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.15**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1987		Vol. 27, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; OEHHA; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.23	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>500K-1M	lbs/yr	1998			
	10K-500K	lbs/yr	2002			
Use	Former pesticide; dye intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	53	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.74	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.20E-07	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	36			

Contaminant	p-Dinitrobenzene
Substance Key:	4094
Contaminant ID (CASRN):	100254

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.0001**	**mg/kg-d**		**Increased spleen weight**	**Reference Dose; Cody et al 1981; Basis NOAEL, rat, UF=3000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N			CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	28,100	lbs/yr	1	States	2004	
TRI Release - total	**28,711**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Chemical intermediate; dye constituent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	221	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.46	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.69E-07	atm-m^3/mol		
Water Solubility	69	mg/L		
% water PBT profiler				

Contaminant	Pentabromodiphenyl ethers
Substance Key:	31963
Contaminant ID (CASRN):	32534819

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.002**	**mg/kg-d**	**1986**	**Induction of hepatic enzymes**	**Reference Dose; Carlson, 1980; Basis NOAEL 1.77 mg/kg-d, rat, UF=1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		Induction of hepatic enzymes	Reference Dose; Carlson, 1980; Basis NOAEL/LOAEL, rat, UF=1000
ATSDR (ITER), MRL	0.007	mg/kg-d	2004	Hepatic	Minimal Risk Level; Int.
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1990		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			
Use	Flame retardant (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient	**30,500**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	7.66	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.55E-06	atm-m^3/mol		
Water Solubility	0.000079	mg/L		
% water PBT profiler				

Contaminant	Pentachloroethane
Substance Key:	2699
Contaminant ID (CASRN):	76017

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	4	2

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**126**	**mg/kg-d**		**increased glucose excretion**	**Supplemental Data, NTP, NIH Pub 96-3935, 1996**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1999		Vol. 41, Suppl. 7; Vol. 71
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	294	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	5	lbs/yr	1	States	2004	
TRI Release - total	**865**	**lbs/yr**	**4**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	429	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:			Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>10K-500K	lbs/yr	2002			

Use	Industrial solvent; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180 days	length of time	BST	BST = Biodegrades sometimes/reclacitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	117-244	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	500	mg/L		
% water PBT profiler	13			

Contaminant	Pentaerythritol
Substance Key:	5114
Contaminant ID (CASRN):	115775

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**100**	**mg/kg-d**		**Diarrhea**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	2,000	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			
Use	Chemical intermediate for resins, paints, pharmaceuticals, insecticides (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	9	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1.69	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.10E-10	atm-m^3/mol		
Water Solubility	72,300	mg/L		
% water PBT profiler	**34**			

Contaminant	Pentaerythritol dibromide
Substance Key:	14700
Contaminant ID (CASRN):	3296900

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**100**	**mg/kg-d**	**1980**	**Sense Organs and Special Senses (Eye) - effect, not otherwise specified**	**Lowest Observed Adverse Effect Level; JCTODH Journal of Combustion Toxicology. (Westport, CT) V.3-9, 1976-82. Volume(issue)/page/year 7,77,1980**
Supplemental LOAEL		mg/kg-d			Supplemental Data;
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B				No quantitative data for the cancer endpoint were identified; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring."
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC; CACART
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	233	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			
Use	Flame retardant; polymer intermediate (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	420	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.29	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.10E-09	atm-m^3/mol		
Water Solubility	38,000	mg/L		
% water PBT profiler	**34**			

Contaminant	Pentanal
Substance Key:	4865
Contaminant ID (CASRN):	110623

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	4	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA 90%: 26.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**3,200**	**mg/kg**		**No effect reported other than lethality.**	**Sax, N.I. Dangerous Properties of Industrial Materials. 6th ed. New York, NY: Van Nostrand Reinhold, 1984., p. 2716**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	224	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	
DBP ICR	**236**	**1**	**0.42**	**8.5**	**8.5**	**8.5**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Mean value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/DBP ICR MED)	Non-cancer: 26.4		Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	lbs/yr	2002			

Use	Food additive; rubber additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	8.7	length of time	BFA	BF = Biodegrades fast with acclimation
K_{OC}, Organic Carbon Partition Coefficient	1,040	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.31	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000147	atm-m^3/mol		
Water Solubility	13.5	mg/L		
% water PBT profiler	41			

Contaminant	Phenolphthalein
Substance Key:	2743
Contaminant ID (CASRN):	77098

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	5	1	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	400	mg/kg-d		Liver - tumors, Tumorigenic - active as anti-cancer agent	Lowest Observed Adverse Effect Level; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year
Supplemental LOAEL	**400**	**mg/kg-d**		**Hyperplasi of the parathyroid, fibrous osteodystrophy of the bone, hypersplais of the thyroid advanced nephropathy - clear evidence of cancer in mice and male rats-some evidence in female rats.**	**Supplemental Data; NTP report TR-465.**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		2000		Vol. 76; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	933	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data		lbs/yr							
	10K-500K	**lbs/yr**	**1994**						
Use	Chemical reagent; medical indicator (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	490	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.41	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.00E-16	atm-m^3/mol		
Water Solubility	400	mg/L		
% water PBT profiler	**13**			

Contaminant	Phenyl ether
Substance Key:	4208
Contaminant ID (CASRN):	101848

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	7	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**2,450**	**mg/kg**		**Behavioral - food intake (animal), Behavioral - muscle weakness, Gastrointestinal - other changes**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year 0TS0518143**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>50M-100M	lbs/yr	1998						
	>50M-100M	**lbs/yr**	**2002**						
Use	Synthetic intermediate; in PPCPs (Merck Index, 1983)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	1,950	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.21	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00028	atm-m^3/mol		
Water Solubility	18	mg/L		
% water PBT profiler	**17**			

Contaminant	Phenylmercury acetate
Substance Key:	2433
Contaminant ID (CASRN):	62384

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	5	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.00008**	**mg/kg-d**	**1985**	**Kidney damage at the LOAEL, kidney lesions at higher doses**	**Reference Dose; Fitzhugh et al., 1950; Basis NOAEL 0.0084 mg/kg-d, rat, UF=100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.00008	mg/kg-d			Reference Dose; Fitzhugh et al., 1950; Basis NOAEL/LOAEL, rat, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.625	mg/kg-d	2001	Kidney, Ureter, Bladder - other changes	Lowest Observed Adverse Effect Level; 2-year oral study in rat; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1380,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	13.3	mg/kg	1980	Details of toxic effects not reported other than lethal dose value	YAKUD5 Gekkan Yakuji. Pharmaceuticals Monthly. (Yakugyo Jihosha, Inaoka Bldg., 2-36 Jinbo-cho, Kanda, Chiyoda-ku, Tokyo 101, Japan) V.1- 1959- Volume(issue)/page/year 22,291,1980
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.56	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			
Use	Former pesticide; disinfectant; drug preservative (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**171.8**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	0.71	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.65E-10	atm-m^3/mol		
Water Solubility	4,370	mg/L		
% water PBT profiler				

Contaminant	Phenytoin
Substance Key:	2317
Contaminant ID (CASRN):	57410

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5		1	5

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
NC HRL/Vanderford MAX: 68.8

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
Supplemental ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	20.5	mg/kg-d		Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; NTPTR National Toxicology Program Technical Report Series. (Research Triangle Park, NC 27709) No.206- Volume(issue)/page/year NTP-TR-404,1993
Supplemental LOAEL	**5**	**mg/kg-d**			**Maximum Recommended Daily Dose (MRDD)**
Supplemental LOAEL	4.3	mg/kg-d			Minimum Therapeutic Dose (MTD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
DSSTOX TD_{50}	59.1	mg/kg-d			Tumorigenic Dose - 50
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1996		Vol. 66; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART; UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	11.7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**15,981**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
Snyder, 2008					0.032				Finished Drinking Water Monitoring; Snyder, Shane A. 2008. Ozone: Science and Engineering. 30(1): 65-69.
Snyder, 2008					0.04				Raw Drinking Water Monitoring; Snyder, Shane A. 2008. Ozone: Science and Engineering. 30(1): 65-69.
Vanderford et al., 2006					0.17				Ambient Water Monitoring; Vanderford et al., 2006 Env. Sci. & Technol. 40(23), pp. 7312-7320.
HRL Ratios (HRL/Vanderford MAX)	Non-cancer: 68.8				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Pharmaceutical (ChemIDPlus)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slowly with acclimation
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.02E-11	atm-m^3/mol		
Water Solubility	32	mg/L		
% water PBT profiler	16			

Contaminant	Phosmet
Substance Key:	9544
Contaminant ID (CASRN):	732116

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/GWC EEC: 193

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.011**	**mg/kg-d**		**RBC & serum ChE inhibition**	**Reference Dose**
EPA IRIS (ITER) RfD	0.02	mg/kg-d	1986	Red. Body weight; liver cell vacuolization; ChE inhibition	Reference Dose; Stauffer Chemical 1967; Basis NOEL 2 mg/kg-d, rat, UF=100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d		Reduced body wt; liver cell vacuolization; Cholinerase inhibition	Reference Dose; Stauffer Chemical 1967; Basis NOEL/LEL, rat, UF=101
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.01	mg/kg-d	1998		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	26	mg/kg	1969	Behavioral - somnolence (general depressed activity), Behavioral - muscle contraction or spasticity, Lungs, Thorax, or Respiration - dyspnea	HYSAAV Hygiene and Sanitation (USSR). English translation of GISAAA. (Springfield, VA) 1964-71. Discontinued. Volume(issue)/page/year 34(1-3),192,1969
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	77	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,333,468**	**lbs/yr**	**40**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	134							ug/L	Pesticide Data Program (USDA) 2001
PDP	381							ug/L	Pesticide Data Program (USDA) 2002
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) Ambient and finished water; method 9002 (GC/MS)
CAL DHS	11	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

OPP Estimated Environmental Concentration	Surface water chronic:	Ground water chronic: 0.4 ug/L	
HRL Ratios (HRL/GWC EEC)	Non-cancer: 193	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	42.9	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.39E-09	atm-m^3/mol		
Water Solubility	24.4	mg/L		
% water PBT profiler	19			

Contaminant	Phosphorus
Substance Key:	19191
Contaminant ID (CASRN):	7723140

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	7	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/NIRS 90%: 0.00037

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.00002**	**mg/kg-d**	**1990**	**Parturition mortality; forelimb hair loss**	**Reference Dose; Basis = NOAEL 0.015 mg/kg-d, UF = 1000, rat, oral (Condray, 1985)**
EPA HA RfD	0.00002	mg/kg-d			Reference Dose
RAISHE RfD	0.00002	mg/kg-d			Reference Dose; Basis = NOAEL/LOAEL, MF = 1, UF = 1000, rat (Condray, 1985)
ATSDR (ITER), MRL	0.0002	mg/kg-d	1997		Minimal Risk Level; Int., oral, UF = 100, Endpoint = repro.
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.00005	mg/kg-d	1989	Behavioral - alteration of classical conditioning	Lowest Observed Adverse Effect Level; oral study in rat
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D		1990		
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.0005				Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**392**	**39.6**	**42**	**555**	**104**	**381**	**1,576**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water	8,090	5,432	67.1	1	11,000	44	270	1,909	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	4,457	lbs/yr	4	States	2004	
TRI Release - total	31,102	lbs/yr	16	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.00037				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Former pesticide; chemical intermediate; as ammunition (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	14.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.27	unitless		
Kd, Distribution coefficient	3.5	L/kg		
HLC, Henry's Law Constant	0.0244	atm-m^3/mol		
Water Solubility	205,000	mg/L		
% water PBT profiler				

Contaminant	Phthalic acid
Substance Key:	3343
Contaminant ID (CASRN):	88993

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	5	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**105**	**mg/kg-d**		**Decreased body weight gain**	**Supplemental Data; Journal - Toxicology Letters 93 (1997) 109-115. Ema, et al.**
RTECS Lowest Oral Chronic LOAEL	0.56	mg/kg-d	1967	Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol)	Lowest Observed Adverse Effect Level; 26-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 32(8),12,1967
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	733	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr				
	>1M-10M	**lbs/yr**	**1994**			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**2.5-5 weeks**	**length of time**	**BS**	**BS = Biodegrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	2-31	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.73	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.00E-11	atm-m^3/mol		
Water Solubility	6,965	mg/L		
% water PBT profiler	**36**			

Contaminant	Piperidine
Substance Key:	4890
Contaminant ID (CASRN):	110894

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	9	5	5

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**22.4**	**mg/kg**	**1975**	**Details of toxic effects not reported other than lethal dose value**	**TPKVAL Toksikologiya Novykh Promyshlennykh Khimicheskikh Veshchestv. Toxicology of New Industrial Chemical Substances. For English translation, see TNICS. (Izdatel'stvo Meditsina, Moscow, USSR) No.1- 1961- Volume(issue)/page/year 14,90,1975**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No HRL; No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Chemical intermediate; rubber accelerator (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.84	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.35E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**45**			

Contaminant	p-Nitrosodiphenylamine
Substance Key:	6319
Contaminant ID (CASRN):	156105

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	1

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**0.022**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	B2				Cited by OEHHA
IARC Carcinogen Classification	3		1987		Vol. 27, Suppl. 7
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; OEHHA; EPA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	1.59	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500K	lbs/yr	1998			
	10K-500K	lbs/yr	2002			
Use	Chemical intermediate; food additive; rubber accelerator (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.10E-08	atm-m^3/mol		
Water Solubility	17.3	mg/L		
% water PBT profiler	16			

Contaminant	p-Nitrotoluene
Substance Key:	4071
Contaminant ID (CASRN):	99990

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	6	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.01	mg/kg-d		splenic lesions	Reference Dose; NTP 1992; Basis LOAEL, rat, UF=3000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	55	mg/kg-d		Blood - leukemia, Tumorigenic - active as anti-cancer agent	Lowest Observed Adverse Effect Level; 105-week oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year NIHNo.01-4432
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.017**	**$(mg/kg\text{-}d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1996		Vol. 65
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	2.06	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			
Use	Chemical intermediate for dyes (HSDB)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**309**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.37	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.63E-06	atm-m^3/mol		
Water Solubility	442	mg/L		
% water PBT profiler				

Contaminant	Poly(dimethyl diallyl ammonium chloride)
Substance Key:	29130
Contaminant ID (CASRN):	26062793

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**290**	**mg/kg-d**	**1988**	**Liver - other, blood - changes in spleen**	**Lowest Observed Adverse Effect Level; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 53(3),66,1988**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,720	mg/kg	1988	Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold, Lungs, Thorax, or Respiration - respiratory depression	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 53(3),66,1988
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	678	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	**>50M-100M**	**lbs/yr**	**1998**			
		lbs/yr	2002			
Use	PPCPs (NLM/NIH)					

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	Potassium
Substance Key:	18836
Contaminant ID (CASRN):	7440097

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	1	10	10

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NIRS 90%: 0.08

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**67**	**mg/kg-d**		**No effect**	**Supplemental Data; DRI pg.235; NAS**
RTECS Lowest Oral Chronic LOAEL	0.94	mg/kg-d	1988	Cardiac - changes in heart weight, Gastrointestinal - other changes, Blood - changes in cell count (unspecified)	Lowest Observed Adverse Effect Level; 180-day oral study in rat; VCVN1 "Vrednie chemichescie veshestva. Neorganicheskie soedinenia elementov I-IV groopp" (Hazardous substances. Inornanic substances containing I-IV group elements), Filov V.A., Chimia, 1988
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	469	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**958**	**96.9**	**311**	**23,955**	**1,860**	**5,939**	**15,422**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	10,193	9,307	91.3	60	3,900,000	2,790	5,000	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.08	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Laboratory reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	p-Phenetidine
Substance Key:	6322
Contaminant ID (CASRN):	156434

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	5	5	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	10	mg/kg-d		Bone marrow toxicity, methemaglobinemia, spleen toxicity	No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.242**	**mg/kg-d**	**1978**	**Blood - normocytic anemia, Blood - methemoglobinemia-carboxyhemoglobin, Blood - other changes**	**Lowest Observed Adverse Effect Level; 9-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-1936- Volume(issue)/page/year 43(1),92,1978; LOAEL was used for potency scoring because it was lower than the NO(A)EL from other studies.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	530	mg/kg	1981	Details of toxic effects not reported other than lethal dose value	GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 25(8),50,1981
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.56	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
HRL Ratios (No water data)	Non-cancer:				Cancer:				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>10M-50M	lbs/yr	1998						
	>1M-10M	**lbs/yr**	**2002**						
Use	Chemical intermediate (Merck Index, 1983; OECD SIDS)								

Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrqades sometimes/recalcitrant (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.24	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.50E-07	atm-m^3/mol		
Water Solubility	7,510	mg/L		
% water PBT profiler	**45**			

Contaminant	Prometon
Substance Key:	11873
Contaminant ID (CASRN):	1610180

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 1,438

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.015**	**mg/kg-d**	**1986**	**No treatment related effects observed. Decreased Potency Score by one integer**	**Reference Dose; Ciba-Geigy, 1982a; Basis NOAEL 15 mg/kg-d, rat, UF=1000. IRIS also reports maternal toxicity in a study not used for the RfD derivation; Severity scored on this critical effect.**
EPA HA RfD	0.015	mg/kg-d	1986		Reference Dose; Ciba-Geigy, 1982a; Basis NOAEL 15, rat, UF=1000
RAISHE RfD	0.015	mg/kg-d			Reference Dose; Ciba-Geigy, 1982a; Basis NOAEL 15, rat, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	15	mg/kg-d	2001	Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 90-day oral study in rat; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1512,2001
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.5		1988		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	105	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	7,128	1,627	22.8	0.0004	40	0.014	0.073	0.381	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water			2.92			0.15			ug/L	National Aggregate
NREC ambient ground water			0.49			0.16			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
CAL DHS	609	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
PDP	288							ug/L	Pesticide Data Program (USDA) 2001
PDP	553	26	4.7	0.0025	0.0025			ug/L	Pesticide Data Program (USDA) 2002
PPMP		145	63.6		0.103			ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2001 (GC/MS)

HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 1,438	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	156	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.99	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.18E-09	atm-m^3/mol		
Water Solubility	750	mg/L		
% water PBT profiler	11			

Contaminant	Propanenitrile
Substance Key:	4591
Contaminant ID (CASRN):	107120

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	7	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**20**	**mg/kg-d**		**Maternal toxicity and slight fetotoxicity**	**Supplemental Data; Journal - Johansen et al, 1986**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	35.8	mg/kg	1996		Lewis, R.J., Dangerous Properties of Industrial Materials, 9th Ed., Vol. 1-3, NY, NY, Van Nostrand Reingold, 1996., p 2799
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Chemical intermediate; industrial solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	29	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.70E-05	atm-m^3/mol		
Water Solubility	130,000	mg/L		
% water PBT profiler	**44**			

Contaminant	Propargite
Substance Key:	13082
Contaminant ID (CASRN):	2312358

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	6	4

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 477

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.04**	**mg/kg-d**		**Decreased body weight & body weight gain, increased mortality. Q1* 0.0033 (mg/kg-day)-1. See CAR**	**Reference Dose**
EPA IRIS (ITER) RfD	0.02	mg/kg-d	1990		Reference Dose; Uniroyal Chemical, 1966, 1982; Basis NOEL 22.5 mg/kg-d, dog, UF=1000
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.02	mg/kg-d			Reference Dose; Uniroyal Chemical, 1966; Basis NOEL, dog, UF=1000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.01	mg/kg-d	1999		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,480	mg/kg	1969	Details of toxic effects not reported other than lethal dose value	TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 14,515,1969
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor	0.0033	$(mg/kg-d)^{-1}$			OPP
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	280	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,108**	**62**	**0.872**	**0.0026**	**20**	**0.044**	**0.587**	**3.5**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	2,538,969	lbs/yr	30	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	253	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	288							ug/L	Pesticide Data Program (USDA) 2001
PDP	688							ug/L	Pesticide Data Program (USDA) 2002
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2001(GC/MS)

HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 477	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	138,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.16E-08	atm-m^3/mol		
Water Solubility	0.5	mg/L		
% water PBT profiler	8			

Contaminant	Propargyl alcohol
Substance Key:	4597
Contaminant ID (CASRN):	107197

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	6	6

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.002**	**mg/kg-d**	**1990**	**Increased liver & kidney weights, megalocytosis of the liver**	**Reference Dose; U.S.EPA, 1987; Basis NOAEL 5 mg/kg-d, rat, UF=3000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.002	mg/kg-d		liver, kidney	Reference Dose; U.S.EPA, 1987; Basis NOAEL/LOAEL, rat, UF=3000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	20	mg/kg	1982	Details of toxic effects not reported other than lethal dose value	38MKAJ "Patty's Industrial Hygiene and Toxicology," 3rd rev. ed., Clayton, G.D., and F.E. Clayton, eds., New York, John Wiley & Sons, Inc., 1978-82. Vol. 3 originally pub. in 1979; pub. as 2nd rev. ed. in 1985. Volume(issue)/page/year 2C,4672,1982
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**64,096**	**lbs/yr**	**6**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>1M-10M	lbs/yr	2002

Use	Corrosion inhibitors; in pharmaceuticals; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BF/BST	BF = Biodegrades fast; BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	1.325	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.15E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Propionaldehyde
Substance Key:	5508
Contaminant ID (CASRN):	123386

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	8	8

3-model Categorical Prediction
L
HRL Ratio(s)
NC HRL/DBP ICR MED: 8.2

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**800**	**mg/kg**	**1971**	**Details of toxic effects not reported other than lethal dose value**	**KODAK Kodak Company Reports. (343 State St., Rochester, NY 14650) Volume(issue)/page/year 21MAY1971**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	56	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR	**236**	**4**	**1.69**	**7.2**	**9.9**	**6.8**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	9,607	lbs/yr	4	States	2004	
TRI Release - total	699,803	lbs/yr	15	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (HRL/DBP ICR MED)	Non-cancer: 8.2				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	lbs/yr	2002			
Use	Former pesticide; chemical intermediate (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	50	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.59	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.30E-05	atm-m^3/mol		
Water Solubility	306,000	mg/L		
% water PBT profiler	48			

Contaminant	Propionic acid
Substance Key:	2861
Contaminant ID (CASRN):	79094

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	8	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**735**	**mg/kg-d**		**hyperplasia of the esophagus; nitrite in urine**	**Supplemental Data; OPP RED**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,640	mg/kg	1974	Details of toxic effects not reported other than lethal dose value	Rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 39(4),86,1974
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	5,145	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	100M-500M	lbs/yr	1998
	100M-500M	**lbs/yr**	**2002**

Use	Pesticide; food additive; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**up to 21 days**	**length of time**	**BS**	**BS = Biodegrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	36	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.33	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**37**			

Contaminant	Propoxyphene hydrochloride
Substance Key:	11929
Contaminant ID (CASRN):	1639607

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	1	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**207**	**mg/kg-d**	**1971**	**Liver - changes in liver weight, Blood - changes in erythrocyte (RBC) count, Nutritional and Gross Metabolic - weight loss or decreased weight gain**	**Lowest Observed Adverse Effect Level; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 19,452,1971**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	82	mg/kg	1971	Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - respiratory depression	Rabbit; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 19,445,1971
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	483	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr				
	10K-500K	**lbs/yr**	**1990**			

Use	d-isomer as veterinary medicine (HSDB - CASRN 469-62-5)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.18	unitless		Kow for d-propoxyphene
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**12**			

Contaminant	Propylene glycol
Substance Key:	2323
Contaminant ID (CASRN):	57556

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	10	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.5**	**mg/kg-d**		**hematological changes**	**Reference Dose; Bauer et al; Basis LOAEL, cat, UF = 3000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	5	mg/kg-d	1994	Blood - normocytic anemia, Blood - other hemolysis with or without anemia	Lowest Observed Adverse Effect Level; 2-year oral study in dog; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,500	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water										
NCOD Round 2 finished water										
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Food additive; in PPCPs; as coolant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**1**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	-0.92	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.31E-10	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Propylene glycol 1-methyl ether
Substance Key:	4655
Contaminant ID (CASRN):	107982

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	8	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.7**	**mg/kg-d**		**Histopathology**	**Reference Dose; USEPA, 1991; Basis NOEL = 1 mg/kg-d, rat, UF = 1000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	5,000	mg/kg	1972	Details of toxic effects not reported other than lethal dose value	Dog; ARZNAD Arzneimittel-Forschung. Drug Research. (Editio Cantor Verlag, Postfach 1255, W-7960 Aulendorf, Fed. Rep. Ger.) V.1- 1951- Volume(issue)/page/year 22,569,1972
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	4,900	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	In paints and coatings; pesticide solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**1**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	-0.49	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.20E-07	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Propylene glycol monomethyl ether acetate
Substance Key:	4706
Contaminant ID (CASRN):	108656

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**300**	**mg/kg-d**		**Decreased body weight gain**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	8,532	mg/kg		Details of toxic effects not reported other than lethal dose value	DOWCC Dow Chemical Company Reports. (Dow Chemical USA, Health and Environment Research, Toxicology Research Lab., Midland, MI 48640) Volume(issue)/page/year MSD-1582
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,100	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>50M-100M	**lbs/yr**	**2002**

Use	Pesticide inert (EPA OPP)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.56	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.44E-06	atm-m^3/mol		
Water Solubility	198,000	mg/L		
% water PBT profiler	**45**			

Contaminant	Propylene glycol mono-t-butyl ether
Substance Key:	37358
Contaminant ID (CASRN):	57018527

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		5	8

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			Equivocal evidence of carcinogenicity in male rats; clear evidence in male/female mice (NTP)
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M - 10M	lbs/yr	1998
	>1M - 10M	**lbs/yr**	**2002**

Use	Industrial solvent; in PPCPs; in paints and coatings (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST= biodegrades sometimes / recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	5	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.87	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.73E-06	atm-m^3/mol		
Water Solubility	173,000	mg/L		
% water PBT profiler	**40**			

Contaminant	Pyrazon
Substance Key:	12037
Contaminant ID (CASRN):	1698608

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	7	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.18**	**mg/kg-d**		**Decreased body weight & body weight gain**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	66	mg/kg-d	1992	Liver - changes in liver weight, Endocrine - changes in thyroid weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; 13-week oral study in rat; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 17,S171,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	493	mg/kg	1992	Details of toxic effects not reported other than lethal dose value	Guinea pig; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 17,S171,1992
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,260	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**118,294**	**lbs/yr**	**9**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrdaes slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	33-346	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.14	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.50E-12	atm-m^3/mol		
Water Solubility	400	mg/L		
% water PBT profiler	39			

Contaminant	Pyridine
Substance Key:	4887
Contaminant ID (CASRN):	110861

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	9	9

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.001**	**mg/kg-d**	**1987**	**Increased liver weight**	**Reference Dose; U.S.EPA, 1986; Basis NOAEL = 1 mg/kg-d, rat, UF = 1000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.001	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.255	mg/kg-d	1958	Blood - change in clotting factors, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 14-week oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 23(7),30,1958
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	526	lbs/yr	6	States	2004	
TRI Release - total	**1,302,842**	**lbs/yr**	**21**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	lbs/yr	2002			
Use	Solvent; chemical intermediate; food additive; unregistered pesticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA/BST	BFA = Biodegrades fast with acclimation/BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	33	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.65	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.10E-05	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler				

Contaminant	Pyridine, pentachloro-
Substance Key:	12850
Contaminant ID (CASRN):	2176627

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**435**	**mg/kg**		**Sense Organs and Special Senses (Eye) - lacrimation, Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0536503, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M-50M	lbs/yr	1998
	>10M-50M	**lbs/yr**	**2002**

Use	Industrial chemical

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**180 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	2,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.53	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.30E-03	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**16**			

Contaminant	Quartz (SiO2)
Substance Key:	24322
Contaminant ID (CASRN):	14808607

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
1	3	1	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**120,000**	**mg/kg-d**	**1994**	**Gastrointestinal - hypermotility, diarrhea, Gastrointestinal - other changes**	**Lowest Observed Adverse Effect LevelEPASR United States Environmental Protection Agency, Office of Pesticides and Toxic Substances. (U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460) History unknown. Volume(issue)/page/year #86940001000,1994. Rodent - rat.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	1				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	280,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10K-50K	lbs/yr	1998
	>10K-50K	**lbs/yr**	**2002**

Use	Naturally-occurring mineral

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Quizalofop
Substance Key:	76725
Contaminant ID (CASRN):	76578126

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		10	8

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**340,818**	**lbs/yr**	**35**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Derivative of the herbicide quizalofop-ethyl (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.57	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	0.3	mg/L		
% water PBT profiler	12			

Contaminant	Santoflex 13
Substance Key:	9730
Contaminant ID (CASRN):	793248

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	7	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**6**	**mg/kg-d**		**Liver cell enlargement or alteration**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	62.3	mg/kg-d		Liver - changes in liver weight, Blood - normocytic anemia, Blood - changes in leukocyte (WBC) count	Lowest Observed Adverse Effect Level; 90-day oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0545431
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,580	mg/kg	1990	Sense Organs and Special Senses (Eye) - effect, not otherwise specified, Behavioral - food intake (animal), Gastrointestinal - hypermotility, diarrhea	rodent-rat; ATDAEI Acute Toxicity Data. Journal of the American College of Toxicology, Part B. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1- 1990- Volume(issue)/page/year 1,67,1990
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	42	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Antioxidant/antiozonant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**11**			

Contaminant	Sethoxydim
Substance Key:	65122
Contaminant ID (CASRN):	74051802

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.14**	**mg/kg-d**		**Liver effects: hepatocellular hypertrophy & fatty degeneration**	**Reference Dose, BASF Corporation, 1984**
EPA IRIS (ITER) RfD	0.09	mg/kg-d		Mild anemia in males	Reference Dose, BASF Corporation, 1984, NOEL = 9.41 mg/kg-d, dog, UF = 100
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.09	mg/kg-d		Mild anemia in males	Reference Dose, BASF Corp., 1984, NOEL/LEL, dog, UF=100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,200	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	Rat; FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C274,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	980	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**1,717,271**	**lbs/yr**	**48**	**States**	**1997**	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	0	lbs/yr	0	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	2,845	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.38	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.16E-11	atm-m^3/mol		
Water Solubility	25	mg/L		
% water PBT profiler	11			

Contaminant	Silicon
Substance Key:	18845
Contaminant ID (CASRN):	7440213

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	10	10

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**3,160**	**mg/kg**	**1974**	**Details of toxic effects not reported other than lethal dose value**	**FAONAU FAO Nutrition Meetings Report Series. (Rome, Italy) No.?-57, 1948-77. Discontinued. Volume(issue)/page/year 53A,21,1974, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**989**	**100**	**0.26**	**98.9**	**18.1**	**42.1**	**67.5**	**mg/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Chemical intermediate; alloys (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Sodium
Substance Key:	18847
Contaminant ID (CASRN):	7440235

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	10

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 0.14

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**9.38**	**mg/kg-d**	**1988**	**Cardiac - changes in heart weight, Gastrointestinal - other changes, Blood - changes in cell count (unspecified)**	**Lowest Observed Adverse Effect Level, VCVN1 "Vrednie chemichescie veshestva. Neorganicheskie soedinenia elementov I-IV groopp" (Hazardous substances. Inornanic substances containing I-IV group elements), Filov V.A., Chimia, 1988. Volume(issue)/page/year - ,36,1988**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21.9	µg/L			
CADW	200	mg/L			Aesthetic Objective (AO)
EPA HA	20	mg/L	F '03		Health Advisory Status For individuals on a 500mg.day restiricted sodium diet
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**989**	**100**	**0.907**	**1,541**	**16.4**	**160**	**498**	**mg/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,845	11,826	99.8	7	173,000,000			ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.14	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Chemical intermediate; alloys; semiconductors (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BST	assumed persistent; BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	14.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-0.77	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0246	atm-m^3/mol		
Water Solubility	445,000	mg/L		
% water PBT profiler				

Contaminant	Sodium azide
Substance Key:	29534
Contaminant ID (CASRN):	26628228

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	3	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.004**	**mg/kg-d**	**1986**	**Clinical signs (e.g., hunched postures) & reduced body weight**	**Reference Dose; NCI, 1981; Basis NOEL = 5 mg/kg-d, rat, UF = 1,000**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.004	mg/kg-d		Clinical signs & reduced body weight	Reference Dose; NCI, 1981; Basis NOAEL/LOAEL, rat, UF=1,000
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	5	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.25	mg/kg-d	1999	Cardiac - EKG changes not diagnostic of specified effects, Liver - liver function tests impaired, Kidney, Ureter, Bladder - other changes in urine composition	Lowest Observed Adverse Effect Level; 26-week oral study in unspecified mammal; STGNBT "Spravochnik po Toksikologii i Gigienicheskim Normativam (PDK) Potentsial'no Opasnykh Khimicheskikh Veshchestv" Kushneva, V.S., and R.B. Gorshkova, eds. 46, Zhivopisnaya St., 123182, Moscow, Russia, IzdAT 1999 Volume(issue)/page/year -,173,1999
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	28	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**66,425**	**lbs/yr**	**3**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Chemical intermediate; herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient	1.342	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.78E-05	atm-m^3/mol		
Water Solubility	36,700	mg/L		
% water PBT profiler				

Contaminant	Sodium benzoate
Substance Key:	7550
Contaminant ID (CASRN):	532321

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	4	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1,505	mg/kg-d	1991	Behavioral - convulsions or effect on seizure threshold, Nutritional and Gross Metabolic - weight loss or decreased weight gain, Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 13-week oral study in rat; TRENAF Kenkyu Nenpo--Tokyo-toritsu Eisei Kenkyusho. Annual Report of Tokyo Metropolitan Research Laboratory of Public Health. (Tokyo-toritsu Eisei Kenkyusho, 24-1, 3-chome, Hyakunin-cho, Shin-juku-ku, Tokyo 160, Japan) V.1- 1949/50- Volume(issue)/page/year 42,285,1991
Supplemental LOAEL	**2,090**	**mg/kg-d**	**1993**	**Increased liver and kidney weight, increased serum albumin and total protein, increased GGT, enlarged hepatocytes with glassy cytoplasm**	**Supplemental Data, Fujitani, 1993**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,600	mg/kg	1986	Behavioral - changes in motor activity (specific assay), Lungs, Thorax, or Respiration - dyspnea	rodent-mouse; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 51(1),75,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	14,630	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States						
TRI Release - total		lbs/yr		States						
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>10M-50M	lbs/yr	1998							
	>50M-100M	**lbs/yr**	**2002**							
Use	Food and pharmaceutical preservative; medication (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient		L/kg								
log K_{OW}, Octanol Water Partition Coeff.		unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant		atm-m^3/mol								
Water Solubility	556,000	mg/L								
% water PBT profiler	**41**									

Contaminant	Sodium bromide
Substance Key:	19109
Contaminant ID (CASRN):	7647156

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	5	10

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.129**	**mg/kg-d**	**1972**	**Liver - changes in liver weight, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 37(1),13,1972, rodent-rabbit**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,500	mg/kg	1935	Details of toxic effects not reported other than lethal dose value	rat study; JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1- 1909/10- Volume(issue)/page/year 55,200,1935
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.3	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1990**			
		lbs/yr	2002			

Use	Photographic chemical; in chemical synthesis (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	**909,000**	**mg/L**		
% water PBT profiler				

Contaminant	Sodium chlorate
Substance Key:	19266
Contaminant ID (CASRN):	7775099

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	9	8

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 304

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.03**	**mg/kg-d**		**Thyroid hypertrophy**	**Reference Dose**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	1.36	mg/kg-d	1985	Blood - pigmented or nucleated red blood cells, Blood - changes in erythrocyte (RBC) count, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 1-year oral study in rat; JEPOEC Journal of Environmental Pathology, Toxicology and Oncology. (Chem-Orbital, POB 134, Park Forest, IL 60466) V.5(4)- 1984- Volume(issue)/page/year 6(1),105,1985
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,200	mg/kg	2001	Details of toxic effects not reported other than lethal dose value	rodent-rat; HBPTO Handbook of pesticide toxicology. Robert Krieger ed, Academic press, 2001 Volume(issue)/page/year 2,1412,2001
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	210	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**7,261,557**	**lbs/yr**	**16**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data									
OPP Estimated Environmental Concentration		Surface water chronic: 0.69 ug/L				Ground water chronic:			

HRL Ratios (HRL/SWC EEC)	Non-cancer: 304	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Herbicide; oxidizing agent in PPCPs and industrial processes (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	75,000	mg/L		
% water PBT profiler				

Contaminant	Sodium chloroacetate
Substance Key:	15383
Contaminant ID (CASRN):	3926623

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**60**	**mg/kg-d**	**1991**	**Liver - changes in liver weight, Kidney, Ureter, Bladder - changes in bladder weight, Blood - changes in leukocyte (WBC) count**	**Lowest Observed Adverse Effect Level; 90-day oral study in rat; TXCYAC Toxicology. (Elsevier Scientific Pub. Ireland, Ltd., POB 85, Limerick, Ireland) V.1- 1973- Volume(issue)/page/year 67,171,1991**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	95	mg/kg	1941	Details of toxic effects not reported other than lethal dose value	rodent-rat; JIHTAB Journal of Industrial Hygiene and Toxicology. (Cambridge, MA) V.18-31, 1936-49. For publisher information, see AEHLAU. Volume(issue)/page/year 23,78,1941
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Industrial chemical

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**41**			

Contaminant	Sodium dimethyldithiocarbamate
Substance Key:	5680
Contaminant ID (CASRN):	128041

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	7	7	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**114**	**mg/kg-d**	**1976**	**Developmental toxicity**	**Supplimental Data, Toxicology and Applied Pharmacology Volume35, Issue 1, January 1976, Pages 83-94**
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	300	mg/kg	2000	Details of toxic effects not reported other than lethal dose value	rodent- rabbit; TOVEFN Toksikologicheskii Vestnik. (18-20 Vadkovskii per. Moscow, 101479, Russia) History Unknown Volume(issue)/page/year (3),34,2000
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	266	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	31,009	lbs/yr	3	States	2004	
TRI Release - total	**129,318**	**lbs/yr**	**9**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	lbs/yr	2002			

Use	Industrial antimicrobial (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	0.013-1.08 days	length of time	DF	DF = Degrades fast (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	2.2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	39			

Contaminant	Sodium dodecylbenzenesulfonate
Substance Key:	28421
Contaminant ID (CASRN):	25155300

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	7	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**101**	**mg/kg-d**	**1975**	**Liver - other changes, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Nutritional and Gross Metabolic - changes in iron**	**Lowest Observed Adverse Effect Level, AECTCV Archives of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 070944) V.1- 1973- Volume(issue)/page/year 3,115,1975**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	438	mg/kg	1972	**Sense Organs and Special Senses (Eye) - lacrimation, Behavioral - somnolence (general depressed activity), Gastrointestinal - hypermotility, diarrhea**	rodent- rat; TRENAF Kenkyu Nenpo--Tokyo-toritsu Eisei Kenkyusho. Annual Report of Tokyo Metropolitan Research Laboratory of Public Health. (Tokyo-toritsu Eisei Kenkyusho, 24-1, 3-chome, Hyakunin-cho, Shin-juku-ku, Tokyo 160, Japan) V.1- 1949/50- Volume(issue)/page/year 24,397,1972
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	236	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>50M-100M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Detergent; in pesticide formulations (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	111	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.45	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	6.27E-08	atm-m^3/mol		
Water Solubility	800,000	mg/L		
% water PBT profiler	**21**			

Contaminant	Sodium fluoroacetate
Substance Key:	2445
Contaminant ID (CASRN):	62748

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	7	1	1

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00002**	**mg/kg-d**		**Histopathology & decreased size & weight of testes and epididymides**	**Reference Dose**
EPA IRIS (ITER) RfD	0.00002	mg/kg-d		Incr. heart weight; reproductive effects in male	Reference Dose, U.S. EPA, 1988, Basis NOAEL = 0.05 mg/kg-d, rat, UF = 3,000
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.00002	mg/kg-d		increased heart wt, decreased testis wt, altered spermatogenesis	Reference Dose; USEPA, 1988, oral study in rats, UF = 3,000, Basis NOAEL/LOAEL
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.0216	mg/kg-d	1960	Related to Chronic Data - death	Lowest Observed Adverse Effect Level; 30-day study in domestic mammal; JCPTA9 Journal of Comparative Pathology and Therapeutics. (Liverpool, UK) V.1-74, 1883-1964. For publisher information, see JCVPAR. Volume(issue)/page/year 70,145,1960
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	0.066	mg/kg	1951	Details of toxic effects not reported other than lethal dose value	mammal- dog; JPETAB Journal of Pharmacology and Experimental Therapeutics. (Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) V.1- 1909/10- Volume(issue)/page/year 101,82,1951
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Male reproductive	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.14	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2002	
TRI Release - total	**0**	**lbs/yr**	**0**	**States**	**2002**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (No water data)	Non-cancer:				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Rodenticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BSA	BSA = Biodegrades slow with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient	1.201	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-3.78	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.09E-06	atm-m^3/mol		
Water Solubility	111,000	mg/L		
% water PBT profiler				

Contaminant	Sodium hypochlorite
Substance Key:	19138
Contaminant ID (CASRN):	7681529

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	10
Scores based on parent		Scores based on parent	

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NIRS 90%: 0.14 (HRL and NIRS based on parent Sodium)

HEALTH EFFECTS DATA[1] **See parent Sodium**

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**9.38**	**mg/kg-d**	**1988**	**Cardiac - changes in heart weight, Gastrointestinal - other changes, Blood - changes in cell count (unspecified) (for parent sodium)**	**Lowest Observed Adverse Effect Level, VCVN1 "Vrednie chemichescie veshestva. Neorganicheskie soedinenia elementov I-IV groopp" (Hazardous substances. Inornanic substances containing I-IV group elements), Filov V.A., Chimia, 1988. Volume(issue)/page/year - ,36,1988; 9 week study in rats.**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	5,800	mg/kg	1986	Behavioral - changes in motor activity (specific assay), Gastrointestinal - other changes	rodent- mouse; SKEZAP Shokuhin Eiseigaku Zasshi. Food Hygiene Journal. (Nippon Shokuhin Eisei Gakkai c/o Shokuhin Eisei Senta, 2-6-1 Jingumae, Shibuya-ku, Tokyo 150, Japan) V.1- 1960- Volume(issue)/page/year 27,553,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21.9	µg/L			Based on parent Sodium
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**989**	**100**	**0.907**	**1,541**	**16.4**	**160**	**498**	**mg/L**	**For parent sodium**
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NIRS 90%)	Non-cancer: 0.14	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>1M-10M	lbs/yr	1998
	>10M-50M	lbs/yr	2002

Use	Bleach; disinfectant; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	293,000	mg/L		
% water PBT profiler				

Contaminant	Sodium methyldithiocarbamate
Substance Key:	5951
Contaminant ID (CASRN):	137428

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	4	9	10

3-model Categorical Prediction
L? - L
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**20.2**	**mg/kg-d**	**1967**	**Blood - normocytic anemia, Blood - pigmented or nucleated red blood cells, Blood - leukopenia**	**Lowest Observed Adverse Effect Level, GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 32(2),11,1967; 30 week rabbit study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	50	mg/kg	1965	Details of toxic effects not reported other than lethal dose value	rodent- mouse; RREVAH Residue Reviews. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) V.1- 1962- Volume(issue)/page/year 10,97,1965
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Developmental	CACART
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	47.1	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**60,023,092**	**lbs/yr**	**20**	**States**	**1997**	
TRI Release - surface water	40	lbs/yr	1	States	2004	
TRI Release - total	10,500	lbs/yr	2	States	2004	

Supplemental Water Data									Notes
OPP Estimated Environmental Concentration		Surface water chronic: 0 ug/L				Ground water chronic: 0 ug/L			
HRL Ratios (No data for calculating HRL ratio)		Non-cancer:			Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Soil fumigant (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (HSDB)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.62	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	722,000	mg/L		
% water PBT profiler	39			

Contaminant	Sodium sulfide
Substance Key:	11113
Contaminant ID (CASRN):	1313822

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	8	10

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**205**	**mg/kg**	**1986**	**Details of toxic effects not reported other than lethal dose value**	**GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 30(8),30,1986, rodent-mouse**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Metal precipitation; chemical reagent; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	**186,000**	**mg/L**		
% water PBT profiler				

Contaminant	Sodium vanadate
Substance Key:	23292
Contaminant ID (CASRN):	13718268

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	5	

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.001**	**mg/kg-d**		**Kidney- Impaired function**	**Reference Dose, U.S. EPA, 1987, NOAEL, rat, UF=1,000**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.616	mg/kg-d	1986	Gastrointestinal - malabsorption, Kidney, Ureter, Bladder - changes in bladder weight, Nutritional and Gross Metabolic - changes in calcium	Lowest Observed Adverse Effect Level; 6-week oral study in rat; BECTA6 Bulletin of Environmental Contamination and Toxicology. (Springer-Verlag New York, Inc., Service Center, 44 Hartz Way, Secaucus, NJ 07094) V.1- 1966- Volume(issue)/page/year 37,899,1986
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	74.6	mg/kg	1984	Behavioral - ataxia, Lungs, Thorax, or Respiration - dyspnea, Gastrointestinal - hypermotility, diarrhea	rodent- mouse; TOLED5 Toxicology Letters. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1977- Volume(issue)/page/year 23,227,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1986**			
		lbs/yr	2002			
Use	Industrial chemical					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Sorbitol
Substance Key:	2145
Contaminant ID (CASRN):	50704

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	7	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value	833	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD)
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1,167**	**mg/kg-d**	**1999**	**Gastrointestinal - other changes**	**Lowest Observed Adverse Effect Level, FCTOD7 Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982- Volume(issue)/page/year 37,233,1999, mammal- human study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	15,900	mg/kg	1974	Details of toxic effects not reported other than lethal dose value	FAONAU FAO Nutrition Meetings Report Series. (Rome, Italy) No.?-57, 1948-77. Discontinued. Volume(issue)/page/year 53A,498,1974
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,723	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>50M-100M	**lbs/yr**	**2002**			

Use	Food and pharmaceutical additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	2	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.30E-13	atm-m^3/mol		
Water Solubility	2,200,000	mg/L		
% water PBT profiler	**27**			

Contaminant	Spinosyn A
Substance Key:	70751
Contaminant ID (CASRN):	131929607

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 1,522

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	**0.02**	**mg/kg-d**	**2001**	**Vacuolation of the thyroid gland epithelial cells, inflammation in the thyroid, lung, and larynx; bone-marrow hyperplasia and dilatation of liver sinusoids**	**Acceptable Daily Intake, Acute RfD unnecessary**
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**117,315**	**lbs/yr**	**21**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data							
OPP Estimated Environmental Concentration		Surface water chronic: 0.092 ug/L				Ground water chronic	
HRL Ratios (HRL/SWC EEC)		Non-cancer: 1,522				Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Insecticide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.8	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	89.4	mg/L		
% water PBT profiler				

Contaminant	Stearic acid
Substance Key:	2305
Contaminant ID (CASRN):	57114

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	9	8	3

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**1,490**	**mg/kg-d**	**1995**	**Related to Chronic Data - death**	**Lowest Observed Adverse Effect Level, JACTDZ Journal of the American College of Toxicology. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1-15, 1982-1996. Discontinued. Volume(issue)/page/year 14,196,1995, 30 week rodent-rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,478	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>500M-1B	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use: Chemical intermediate; food and pharmaceutical additive (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	720,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	8.23	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	4.80E-07	atm-m^3/mol		
Water Solubility	0.568	mg/L		
% water PBT profiler	**4**			

Contaminant	Sulfurous acid
Substance Key:	19341
Contaminant ID (CASRN):	7782992

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	5	

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.5**	**mg/kg-d**	**1906**	**Gastrointestinal - hypermotility, diarrhea, Gastrointestinal - nausea or vomiting, Gastrointestinal - other changes**	**Lowest Observed Adverse Effect Level, AEXPBL Archiv fuer Experimentelle Pathologie und Pharmakologie. (Leipzig, Ger. Dem. Rep.) V.1-109, 1873-1925. For publisher information, see NSAPCC. Volume(issue)/page/year 54,421,1906, human study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.17	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	**>1M-10M**	**lbs/yr**	**1994**			
		lbs/yr	2002			
Use	Reaction product of SO_2 and H_2O					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Sulfuryl fluoride
Substance Key:	13814
Contaminant ID (CASRN):	2699798

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	2	7

3-model Categorical Prediction
NL? - L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.003**	**mg/kg-d**		**Vacuolization of the white matter in the brain in female rabbits**	**Reference Dose, 1/006**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	100	mg/kg	1988		Zenz, C. Occupational Medicine- Principles and Practical Applications. 2nd ed. St. Louis, MO: Mosby-Yearbook, Inc, 1988., p.684, rat and guinea pig study
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	21	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**142,720**	**lbs/yr**	**2**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Insecticide/fumigant; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	750	mg/L		
% water PBT profiler				

Contaminant	Sulprofos
Substance Key:	32748
Contaminant ID (CASRN):	35400432

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	5	7	6

3-model Categorical Prediction
L?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**0.6**	**mg/kg-d**	**1987**	**Blood - normocytic anemia, Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol), Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - true cholinesterase**	**Lowest Obwerved Adverse Effect Level, NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 12,775,1987, 13 week rodent- rat study**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	65	mg/kg	1977	Details of toxic effects not reported other than lethal dose value	rodent- rat; 85ARAE "Agricultural Chemicals," Thomson, W.T., 4 vols., Fresno, CA, Thomson Publications, 1976/77 revision Volume(issue)/page/year 1,205,1977
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1.4	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**308,039**	**lbs/yr**	**8**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	283								Pesticide Data Program (USDA) 2001
PDP	669								Pesticide Data Program (USDA) 2002
PPMP		0	0	Not Detected	Not Detected	Not Detected	Not Detected		Pesticide Pilot Monitoring Program (USGS/EPA) 9002(GC/MS)

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:			Cancer:		

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Cancelled insecticide (HSDB)			
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**
$T_{1/2}$, Half life	38	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	12,000-13,500	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	8.60E-07	atm-m^3/mol		
Water Solubility	0.31	mg/L		
% water PBT profiler	7			

Contaminant	Tartrazine
Substance Key:	12444
Contaminant ID (CASRN):	1934210

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	5	5	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	**773**	**mg/kg-d**	**2006**	**Neurobehavioral effects**	**Supplemental Data, Tanaka Food chem Toxicol 44:179-87 2006**
Supplemental LOAEL	7.5				Supplemental Data; Maximum Recommended Daily Dose (MRDD)
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	12,750	mg/kg	1966	Details of toxic effects not reported other than lethal dose value	rodent- mouse; FAONAU FAO Nutrition Meetings Report Series. (Rome, Italy) No.?-57, 1948-77. Discontinued. Volume(issue)/page/year 38B,88,1966
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		teratogen list	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,804	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	In sanitizing solutions (food industry); in dyes (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	300,000	mg/L		
% water PBT profiler	**50**			

Contaminant	Tebuthiuron
Substance Key:	32336
Contaminant ID (CASRN):	34014181

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	3

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 7,424

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.07**	**mg/kg-d**		**Reduced body weight gain in F1 females**	**Reference Dose**
EPA IRIS (ITER) RfD	0.07	mg/kg-d	1988	Depressed body wieght gain in F1 males	Reference Dose, Elanco Products, 1981, Basis NOEL = 7 mg/kg-d, rat, UF = 100
EPA HA RfD	0.07	mg/kg-d			Reference Dose
RAISHE RfD	0.07	mg/kg-d		Depressed body weight gain in females	Reference Dose, Elanco Products, 1981, NOEL/LEL, rat, UF = 100
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	7	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	96	mg/kg-d	1992	Gastrointestinal - changes in structure or function of endocrine pancreas, Kidney, Ureter, Bladder - changes in bladder weight	Lowest Observed Adverse Effect Level; 2-year oral study in rat; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome, Toshima-ku, Tokyo 170, Japan) V.1- 1976- Volume(issue)/page/year 17,S35,1992
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	D				
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	2	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	490	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,097**	**799**	**11.26**	**0.001**	**17.3**	**0.013**	**0.066**	**0.546**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	115,712	lbs/yr	2	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	5	lbs/yr	1	States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes
PDP	154	3	1.9	16.3	16.3			ng/L	Pesticide Data Program (USDA) 2001
PDP	336	19	5.7	1	14			ng/L	Pesticide Data Program (USDA) 2002
PPMP		64	28.1		0.032		0.019	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 2001(GC/MS)
PPMP		42	18.7		0.077		0.077	ug/L	Pesticide Pilot Monitoring Program (USGS/EPA) 9060(HPLC/MS)

	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	66		0					ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 7,424			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	22.8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.79	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.20E-10	atm-m^3/mol		
Water Solubility	2,500	mg/L		
% water PBT profiler	27			

Contaminant	Terbufos-O-analogue sulfone
Substance Key:	76778
Contaminant ID (CASRN):	56070156

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	3	1	1
Scores based on parent	Scores based on parent		

3-model Categorical Prediction
NL
HRL Ratio(s)
NC HRL/NAWQA 90%: 1.67 (NAWQA data and HRL for parent terbufos)

HEALTH EFFECTS DATA[1] **See Terbufos and Terbufos sulfone**

Parent Terbufos and Terbufos sulfone on CCL

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.00005**	**mg/kg-d**		**Plasma ChE inhibition**	**Reference Dose - FOR PARENT TERBUFOS**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.35	ug/L			**Based on data for parent terbufos**
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data	**FOR TERBUFOS - PARENT**									
UCMR finished water	**300**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data	**FOR TERBUFOS - PARENT**									
NAWQA ambient water	7,118	22	0.31	0.0021	0.56	0.017	0.21	0.56	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PPMP finished water		2	0.9		0.016				Pesticide Pilot Montoring Program (USGS/EPA)
PPMP ambient water		0	0						Pesticide Pilot Montoring Program (USGS/EPA)
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 1.67			Cancer:					**NAWQA data and HRL for Parent Terbufos**

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Analogue and degradate of the pesticide terbufos					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	14			

Contaminant	Terephthalic acid
Substance Key:	4091
Contaminant ID (CASRN):	100210

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	6	10	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**1**	**mg/kg-d**		**Bladder- Hyperplasia**	**Reference Dose, U.S. EPA, 1986, NOEL, rat, UF = 100**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	143	mg/kg-d		Brain and Coverings - changes in brain weight, Cardiac - changes in heart weight, Kidney, Ureter, Bladder - changes in bladder weight	Lowest Observed Adverse Effect Level; 2-year oral study in rat; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0543783
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,200	mg/kg	1971	Details of toxic effects not reported other than lethal dose value	rodent- mouse; KODAK Kodak Company Reports. (343 State St., Rochester, NY 14650) Volume(issue)/page/year 21MAY1971
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; in poultry feeds (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**71.6**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.89E-13	atm-m^3/mol		
Water Solubility	15	mg/L		
% water PBT profiler				

Contaminant	tert-Butanol
Substance Key:	2670
Contaminant ID (CASRN):	75650

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	10	9

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/CAL DHS 90%: 21.1

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**90**	**mg/kg-d**		**Decreased body weight males; increased relative and absolute and relative kidney weights Cancer some evidence in male rats and female mice, equivocal evidence in male mice and no evidence in female rat**	**Supplemental Data, NTP TR436**
RTECS Lowest Oral Chronic LOAEL	107	mg/kg-d	1995	Liver - other changes, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; 10-week oral study in rat; TOLED5 Toxicology Letters. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1977- Volume(issue)/page/year 80,97,1995
Supplemental LOAEL		mg/kg-d			
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	630	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	12,324	lbs/yr	7	States	2004	
TRI Release - total	**1,548,617**	**lbs/yr**	**31**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	7,600	86	1.13	2	93	3.95	29.9	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx
HRL Ratios (HRL/CAL DHS 90%)	Non-cancer: 21.1				Cancer:				

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1B	lbs/yr	1998			
	>1B	lbs/yr	2002			
Use	Former pesticide; gasoline additive; in PPCPs (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BS/BST	BS = Biodegrades slow (BIODEG); BST = Biodegrades sometimes/recalcitrant (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	37	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.35	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	9.05E-06	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	44			

Contaminant	tert-Butyl hydroperoxide
Substance Key:	2693
Contaminant ID (CASRN):	75912

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**320**	**mg/kg**	**1979**	**Behavioral - irritability, Gastrointestinal - alteration in gastric secretion, Blood - hemorrhage**	**TPKVAL Toksikologiya Novykh Promyshlennykh Khimicheskikh Veshchestv. Toxicology of New Industrial Chemical Substances. For English translation, see TNICS. (Izdatel'stvo Meditsina, Moscow, USSR) No.1- 1961- Volume(issue)/page/year 15,90,1979, rodent-mouse**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Former pesticide; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	97	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.94	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.60E-05	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**42**			

Contaminant	tert-Butylamine
Substance Key:	2669
Contaminant ID (CASRN):	75649

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	4	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**44**	**mg/kg**		**Behavioral - food intake (animal), Lungs, Thorax, or Respiration - pulmonary emboli, Liver - other changes**	**NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0534846, rodent-rat**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M-50M	lbs/yr	1998			
	>10M-50M	**lbs/yr**	**2002**			

Use	Chemical intermediate for rubber accelerators, insecticides, fungicides, dyestuffs, pharmaceuticals and oil additives (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	40	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.4	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**47**			

Contaminant	tert-Butylbenzene
Substance Key:	3932
Contaminant ID (CASRN):	98066

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	3	6

3-model Categorical Prediction
NL?
HRL Ratio(s)
NC HRL/NCOD R1 90%: 1.03

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**4.42**	**mg/kg-d**	**1990**	**Behavioral - alteration of classical conditioning**	**Lowest Observed Adverse Effect Level; VCVGH "Vrednie chemichescie veshestva, galogenproisvodnie uglevodorodov". (Hazardous substances Galogenated hydrocarbons) Bandman A.L. et al., Chimia, 1990. Volume(issue)/page/year -,179,1990; 24 week oral study in rats**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	3,045	mg/kg			rat study
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	10.3	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water	**12,353**	**24**	**0.19**	**0.02**	**10**	**0.8**	**10**	**10**	**ug/L**	
NCOD Round 2 finished water	22,973	25	0.11	0.10	77.5	0.5	5	77.5	ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	4,309	10	0.232	0.009	1.1	0.06	0.11	1.1	ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	Units for Mag data	Notes
CAL DHS	11,885	2	0.02	0.62	0.9	0.76	0.872	ug/L	

HRL Ratios (HRL/NCOD R1 90%)	Non-cancer: 1.03	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Solvent; in organic synthesis (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38 days	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	1,181	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.11	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.0132	atm-m^3/mol		
Water Solubility	29.5	mg/L		
% water PBT profiler	14			

Contaminant	Tetraethyl lead
Substance Key:	2781
Contaminant ID (CASRN):	78002

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
10	6	5	7

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0000001**	**mg/kg-d**	**1985**	**Histopathology of liver & thymus**	**Reference Dose; Basis = LOAEL 0.0012 mg/kg-day, rat, UF = 10,000 (Schepers, 1964)**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.06	mg/kg-d	1983	Endocrine - other changes	Lowest Observed Adverse Effect Level; oral study in rat 6W-C; JANSY Journal of the autonomic nervous system (Amsterdam, Elsevier/North Holland Biomedical Press) V.1-81 1979-2000. Volume(issue)/page/year 8,287,1983
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.0007	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>1M - 10M	**lbs/yr**	**2002**			

Use	Former anti-knock agent in gasoline; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**DS**	**DS = Degrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	**758**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	4.15	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.568	atm-m^3/mol		
Water Solubility	0.29	mg/L		
% water PBT profiler				

Contaminant	Tetrafluoroethene
Substance Key:	5138
Contaminant ID (CASRN):	116143

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		7	7

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1999		Vol. 19, Suppl 7, Vol. 71; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; Clear evidence of carcinogenicity in male and female rats and mice (NTP).
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M-100M	lbs/yr	1998
	>50M-100M	**lbs/yr**	**2002**

Use	Polymer intermediate; in propellants (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	110	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.63	atm-m^3/mol		
Water Solubility	159	mg/L		
% water PBT profiler	**44**			

Contaminant	Tetrahydrofuran
Substance Key:	4813
Contaminant ID (CASRN):	109999

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	7	9	6

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NAWQA AW 90%: 375

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI	0.01	mg/kg-d	2000		Tolerable Daily Intake; Oral study
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**481**	**mg/kg-d**		**Systemic parental and developmental toxicity.**	**Supplemental Data; (Hellwig, et al. Food and Chemical Toxicology 40 (2002) 1515-1523)**
RTECS Lowest Oral Chronic LOAEL	38.2	mg/kg-d	1967	Blood - change in clotting factors, Blood - changes in leukocyte (WBC) count, Nutritional and Gross Metabolic - weight loss or decreased weight gain	Lowest Observed Adverse Effect Level; oral study in rat 17W-I; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 32(2),99,1967
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3,366	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**2,601**	**93**	**3.58**	**0.07**	**1,430**	**0.75**	**8.98**	**1,146**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NAWQA AW 90%)	Non-cancer: 375	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	lbs/yr	2002			

Use	Solvent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)
K_{OC}, Organic Carbon Partition Coefficient	18-23	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.46	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.10E-05	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	48			

Contaminant	Tetramethylammonium chloride
Substance Key:	2662
Contaminant ID (CASRN):	75570

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**50**	**mg/kg**		**Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold, Skin and Appendages - hair**	**(NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0536975)**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Drug / Therapeutic Agent (NLM/NIH/ChemIDPlus)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-4.18	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	Tetramethylammonium hydroxide
Substance Key:	2664
Contaminant ID (CASRN):	75592

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	6	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**5**	**mg/kg-d**		**Decreased relative organ weight**	**No Observed Effect Level; NOEL Type - Repeat Dose**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	34	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	35	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>10M - 50M	**lbs/yr**	**2002**			

Use	In semiconductor manufacturing (NLM/NIH/Haz-map)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.47	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	Tetrasodium EDTA
Substance Key:	2459
Contaminant ID (CASRN):	64028

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	1	8	8

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**250**	**mg/kg-d**	**1966**	**No observed effects**	**Supplemental Data, Oser et al, 1966**
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	2,000	mg/kg	2004		European Chemicals Bureau; IUCLID Dataset, Tetrasodium ethyleneadiaminetetraacaetate (64-02-8) (2000 CD-ROM edition). Available from the database query page: http://ecb.jrc.it/esis/esis.php as of February 18, 2004.
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	1,750	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M-500M	lbs/yr	1998			
	>100M-500M	**lbs/yr**	**2002**			

Use	Chelating agent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	500,000	mg/L		
% water PBT profiler	**50**			

Contaminant	Texanol
Substance Key:	28538
Contaminant ID (CASRN):	25265774

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	9	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**3,200**	**mg/kg**	**1981**	**Details of toxic effects not reported other than lethal dose value**	**(KODAK Kodak Company Reports. (343 State St., Rochester, NY 14650) Volume(issue)/page/year M-158E,1981)**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	**lbs/yr**	**2002**			

Use	In latex paints; chemical intermediate (OECD/SIDS)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**20**			

Contaminant	Thifensulfuron
Substance Key:	66172
Contaminant ID (CASRN):	79277671

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	10	7
Scores based on parent		Scores based on parent	

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.02**	**mg/kg-d**		**Decreased body weight and body weight gain**	**Reference Dose (for thifensulfuron-methyl)**
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	140	µg/L			Based on RfD for thifensulfuron-methyl.
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**105,145**	**lbs/yr**	**37**	**States**	**1997**	**Data for thifensulfuron-methyl**
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Derivative of the pesticide thifensulfuron-methyl (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	38			

Contaminant	Thiocarbazide
Substance Key:	12972
Contaminant ID (CASRN):	2231574

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	6	5	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**6**	**mg/kg**	**1994**	**Behavioral - somnolence (general depressed activity), Behavioral - convulsions or effect on seizure threshold, Lungs, Thorax, or Respiration - dyspnea**	**(MTPEEI Meditsina Truda i Promyshlennaya Ekologiya. Industrial Medicine and Ecology. (Mezhdunarodnaya Kniga, ul.B. Yakimanka, 39 117049 Moscow, Russia) No.1- 1993- Volume(issue)/page/year (2),43,1994)**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	**lbs/yr**	**2002**			

Use	Veterinary medicine; microscopy reagent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.04	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	5,500	mg/L		
% water PBT profiler	**39**			

Contaminant	Thiophenol
Substance Key:	4734
Contaminant ID (CASRN):	108985

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
8	3	1	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.00001**	**mg/kg-d**		**Centrilobular eosinophilic changes**	**Reference Dose**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.01	mg/kg-d	1994	Behavioral - changes in motor activity (specific assay), Blood - changes in leukocyte (WBC) count, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases	Lowest Observed Adverse Effect Level; oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 1,7,1994
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	46.2	mg/kg	1958	Behavioral - somnolence (general depressed activity), Behavioral - coma, Lungs, Thorax, or Respiration - respiratory depression	AIHAAP American Industrial Hygiene Association Journal. (AIHA, 475 Wolf Ledges Pkwy., Akron, OH 44311) V.19- 1958- Volume(issue)/page/year 19,171,1958
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	0.07	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
	10K - 500K	**lbs/yr**	**2002**			

Use	Chemical intermediate for pesticides, pharmaceuticals and dyes; mosquito larvicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**268**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.52	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000335	atm-m^3/mol		
Water Solubility	835	mg/L		
% water PBT profiler				

Contaminant	Thiram
Substance Key:	5945
Contaminant ID (CASRN):	137268

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	9	5

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/SWC EEC: 24.4

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.015**	**mg/kg-d**		**Changes in hematology, clinical chemistry, incidences of bile duct hyperplasia, & reduction in mean body weight gain**	**Reference Dose**
EPA IRIS (ITER) RfD	0.005	mg/kg-d	1987	Neurotoxicity	Reference Dose; Basis = NOEL 5 mg/kg-day, rats, oral, UF = 1000 (DuPont, 1954)
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.005	mg/kg-d		Neurotoxicity	Reference Dose; Basis = NOEL/LEL, rats, oral, low conf., UF = 100, MF = 1 (DuPont, 1954)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI	0.01	mg/kg-d	1992		Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.005	mg/kg-d	1993	Cardiac - arrhythmias (including changes in conduction), Cardiac - other changes	Lowest Observed Adverse Effect Level; oral study in pig; CUTOEX Current Toxicology. (Nova Science Publishers, Inc., 6080 Jericho Turnpike, Suite 207, Commack, NY 11725) V.1 1993-Volume(issue)/page/year 1,221,1993.
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				Vol 53; 1991
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	105	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total	**179,809**	**lbs/yr**	**21**	**States**	**1997**					
TRI Release - surface water	34	lbs/yr	5	States	2004					
TRI Release - total	102,508	lbs/yr	21	States	2004					
Supplemental Water Data										
OPP Estimated Environmental Concentration		Surface water chronic: 4.3 ug/L				Ground water chronic: 0.84 ug/L				
HRL Ratios (HRL/SWC EEC)	Non-cancer: 24.4				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>1M - 10M	lbs/yr	1998							
	>1M - 10M	lbs/yr	2002							
Use	Pesticide; rubber accelerator; antiseptic (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slow (PBT)						
K_{OC}, Organic Carbon Partition Coefficient	10	L/kg								
log K_{OW}, Octanol Water Partition Coeff.	1.73	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	3.03E-07	atm-m^3/mol								
Water Solubility	835	mg/L								
% water PBT profiler										

Contaminant	Thorium-232
Substance Key:	18853
Contaminant ID (CASRN):	7440291

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		5	8

No further evaluation for CCL - regulated under Radionuclides Rule.

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	1.01E-10	risk/pCi			pCi = picoCuries
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water	**989**	**5**	**0.506**		**61.7**	**6**	**39**	**59**	**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Nuclear reactors; welding; ceramics (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time		
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient	150,000	L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant	Tralomethrin
Substance Key:	42610
Contaminant ID (CASRN):	66841256

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	8	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0075**	**mg/kg-d**		**Decreased body weight gain; increased water consumption**	**Reference Dose; Basis: NOEL of 0.75 mg/kg/day in oral Rat study (Roussel UCLAF, 1984); UF = 100**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.0075	mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	10	mg/kg-d		Behavioral - tremor, Behavioral - ataxia, Gastrointestinal - nausea or vomiting	Lowest Observed Adverse Effect Level; oral study in dog 13W-C; NTIS National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year OTS0545197
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	99	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	Rat; PEMNDP Pesticide Manual. (The British Crop Protection Council, 20 Bridport Rd., Thornton Heath CR4 7QG, UK) V.1- 1968- Volume(issue)/page/year 9,829,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	52.5	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**23,767**	**lbs/yr**	**15**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
PDP	115	0	0	Not Detected	Not Detected	Not Detected	Not Detected	ug/L	Pesticide Data Program (USDA)

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Pesticide; medication (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	263,000	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	7.56	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.94E-10	atm-m^3/mol		
Water Solubility	0.08	mg/L		
% water PBT profiler	1			

Contaminant:	Tribromoacetic acid (TBAA)
Substance Key:	2695
Contaminant ID (CASRN):	75967

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		9	8

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	
DBP ICR finished water	**2,587**	**89**	**3.4**	**5.77**	**19**	**5**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# PWSs/Sites/ Samples	# with Detects	% PWSs/Sites/ Samples with detects	Minimum value of Detects (ug/L)	Maximum value of Detects (ug/L)	Median value of Detects (ug/L)	90% of Detects (ug/L)	Units for Mag data	Notes
CAL DHS	40	10	25	1	15	4	7.52	ug/L	Drinking water monitoring; http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Chemicalcontaminants.aspx

HRL Ratios (no HRL)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	15 days	length of time	BS	BS = Biodegrades slowly
K_{OC}, Organic Carbon Partition Coefficient	5.3	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.71	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.34E-09	atm-m^3/mol		
Water Solubility	200,000	mg/L		
% water PBT profiler	26			

Contaminant	Tributyltin chloride
Substance Key:	11595
Contaminant ID (CASRN):	1461229

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	4	5	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0003**	**mg/kg-d**		**Based on IRIS RfD for TBT oxide, converted to TBTchloride. Immunosuppression**	**Reference Dose**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	15	mg/kg-d	1985	Endocrine - other changes, Endocrine - changes in spleen weight, Endocrine - changes in thymus weight	Lowest Observed Adverse Effect Level; oral study in rat 2W-C; TXAPA9 Toxicology and Applied Pharmacology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1- 1959- Volume(issue)/page/year 81,274,1985
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	0.03	mg/kg	1986	Details of toxic effects not reported other than lethal dose value	Rat; 85JCAE "Prehled Prumyslove Toxikologie; Organicke Latky," Marhold, J., Prague, Czechoslovakia, Avicenum, 1986 Volume(issue)/page/year -,1250,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2.1	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	**lbs/yr**	**2002**			

Use	Former pesticide; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**6 days-35 weeks**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient	90,800	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient	**60,000**	**L/kg**		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler				

Contaminant:	Trichloroacetonitrile
Substance Key:	7769
Contaminant ID (CASRN):	545062

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		8	6

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL		mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water										
	# PWSs/Sites sampled	**# with Detects**	**% PWSs/Sites with detects**	**Mean value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
DBP ICR finished water	**11,127**	**192**	**1.7**	**4.23**	**41.54**	**0.8**			**ug/L**	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States		
TRI Release - surface water		lbs/yr		States		
TRI Release - total		lbs/yr		States		

Supplemental Water Data	# Samples	# with Detects	% Samples w/ Detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	95% of Detects	Units for Mag data	Notes

HRL Ratios (no HRL)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K-500k	lbs/yr	1998			
	10K-500k	lbs/yr	2002			

Use	Disinfection By-Product

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant
K_{OC}, Organic Carbon Partition Coefficient	330	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	2.09	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.34E-06	atm-m^3/mol		
Water Solubility	715	mg/L		
% water PBT profiler	27			

Contaminant	Triethanolamine
Substance Key:	4260
Contaminant ID (CASRN):	102716

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5		8	5

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL	10	mg/kg-d			Supplemental Data; Maximum Recommended Daily Dose (MRDD); Incomplete data for attribute scoring
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		2000		Vol. 77
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	23.33	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>100M-500M	lbs/yr	1998
	>100M-500M	**lbs/yr**	**2002**

Use	Cancelled pesticide; chemical intermediate; in detergents; chelating agent (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	7	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-1	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.10E-13	atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Triethylene glycol
Substance Key:	5015
Contaminant ID (CASRN):	112276

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	8	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	**3.57**	**mg/kg-d**	**1987**	**Liver - liver function tests impaired, Kidney, Ureter, Bladder - other changes, Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - transaminases**	**Lowest Observed Adverse Effect Level; (GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 52(12),77,1987)**
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	7,900	mg/kg		Liver - other changes, Kidney, Ureter, Bladder - other changes	Guinea pig; VCVGK "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume(issue)/page/year -,146,1984
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	8.33	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:			Cancer:		
Production	**Amount Range**	**Units**	**Year**			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	**lbs/yr**	**2002**			
Use	Industrial solvent; plasticizer; medication (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	10	L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.10E-11	atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**39**			

Contaminant	Trifluralin
Substance Key:	11820
Contaminant ID (CASRN):	1582098

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	3	9	2

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
NC HRL/NAWQA 90%: 6,222 CAR HRL/NAWQA 90%: 5

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD	**0.024**	**mg/kg-d**		**Reduced body weight, decreased RBC & hemoglobin levels, increased thrombocyte, methemoglobin, cholesterol & triglyceride levels & increased liver weight. Q1* 0.0058 (mg/kg-day)-1. Group C. See CAR**	**Reference Dose**
EPA IRIS (ITER) RfD	0.0075	mg/kg-d			Reference Dose; Basis = NOEL 0.75 mg/kg/day, dog, oral, UF = 100 (Hoechst Aktiengesellschaft, 1984a)
EPA HA RfD	0.0075	mg/kg-d			Reference Dose
RAISHE RfD	0.0075	mg/kg-d		Increased liver weight, increase in methemoglobin	Reference Dose; Basis = NOEL/LEL, dog, MF = 1 (Hoechst Aktiengesellchaft, 1984)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	0.75	mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	25	mg/kg-d	1991	Liver - changes in liver weight	Lowest Observed Adverse Effect Level; oral study in dog 3Y-I; NNGADV Nippon Noyaku Gakkaishi. Journal of the Pesticide Science Society of Japan. (Nippon Noyaku Gakkai, 1-43-11, Komagome,
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.5	mg/L			
RAISHE Slope Factor	0.0077	$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor	0.0058	$(mg/kg-d)^{-1}$	2004		OPP
EPA Carcinogen classification	C			Kidney, bladder, thyroid	Emmerson et al., 1980
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.3	mg/L			Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	168	µg/L			
Health Reference Level (HRL)[2] cancer	5	µg/L			
CADW	0.045	mg/L			Canadian Drinking Water Maximum Allowable Concentration

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**7,118**	**380**	**5.34**	**0.0005**	**1.74**	**0.006**	**0.027**	**0.15**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	22,263,693	lbs/yr	46	States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	9,341	lbs/yr	12	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes
HRL Ratios (HRL/NAWQA 90%)	Non-cancer: 6,222				Cancer: 185				

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			
Use	Herbicide (HSDB)					

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	180 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	9,682	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	5.34	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000103	atm-m^3/mol		
Water Solubility	0.184	mg/L		
% water PBT profiler	3			

Contaminant	Trimellitic anhydride
Substance Key:	7816
Contaminant ID (CASRN):	552307

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	5	8	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI	0.75	mg/kg-d			Acceptable Daily Intake; No Severity information is available; hence LD_{50} used for Potency/Severity scoring.
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**1,900**	**mg/kg**	**1974**	**Lungs, Thorax, or Respiration - dyspnea**	**Mouse; GTPZAB Gigiena Truda i Professional'nye Zabolevaniya. Labor Hygiene and Occupational Diseases. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1-36, 1957-1992. For publisher information, see MTPEEI Volume(issue)/page/year 18(7),57,1974**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>100M - 500M	lbs/yr	1998			
	>100M - 500M	**lbs/yr**	**2002**			

Use	Preparation of resins, adhesives, polymers, dyes; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**DF**	**DF = Degrades fast (HSDB)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**23**			

Contaminant	Trimethyl phosphate
Substance Key:	7393
Contaminant ID (CASRN):	512561

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	1	8

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	40	mg/kg-d			No Observed Effect Level; Changes in thymus and kidney weight; hematological effects;kidney lesions; nephropathy; decreased copulation rate, decreased fertility index and number of implantation sites; intrauterine mortality of embryos increased.
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	70.2	mg/kg-d	1997	Peripheral Nerve and Sensation - sensory syndrome diagnostic of central lesion, Behavioral - muscle weakness, Blood - pigmented or nucleated red blood cells	Lowest Observed Adverse Effect Level; oral study in rat 2.5Y-C; FAATDF Fundamental and Applied Toxicology. (Academic Press, Inc., 1 E. First St., Duluth, MN 55802) V.1-40, 1981-97. For publisher information, see TOSCF2 Volume(issue)/page/year 40,75,1997
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.037**	**$(mg/kg-d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; RAISHE
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	CACART; UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.946	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	10K - 500K	lbs/yr	1998			
	10K - 500K	**lbs/yr**	**2002**			

Use	Gasoline additive; antioxidant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**7.644**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	-0.65	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	7.19E-09	atm-m^3/mol		
Water Solubility	500,000	mg/L		
% water PBT profiler				

Contaminant	Trimethylamine
Substance Key:	2657
Contaminant ID (CASRN):	75503

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	6	7	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**40**	**mg/kg-d**		**Intestinal lesions. Inflammation, ulceration, and hyperplasia of squamous epithelium; edema of submucosa in GI tract.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	397	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	280	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>10M - 50M	lbs/yr	1998			
	>50M - 100M	**lbs/yr**	**2002**			

Use	Organic synthesis; corrosion inhibitor; fungicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	29	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.16	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	890,000	mg/L		
% water PBT profiler	**52**			

Contaminant	Trimethylolpropane
Substance Key:	2780
Contaminant ID (CASRN):	77996

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	7	7

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI	0.05	mg/kg-d			Acceptable Daily Intake; No Severity information is available; hence NOEL used for Potency/Severity scoring.
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**800**	**mg/kg-d**		**Increased relative organ weight**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	13,700	mg/kg	1967	Behavioral - somnolence (general depressed activity), Lungs, Thorax, or Respiration - dyspnea, Lungs, Thorax, or Respiration - respiratory depression	Mouse; HYSAAV Hygiene and Sanitation (USSR). English translation of GISAAA. (Springfield, VA) 1964-71. Discontinued. Volume(issue)/page/year 32(5),288,1967
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	5,600	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>50M - 100M	lbs/yr	1998
	>50M - 100M	**lbs/yr**	**2002**

Use	Chemical intermediate for polymers (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BS**	**BS = Biodegrades slow (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	1,000,000	mg/L		
% water PBT profiler	**40**			

Contaminant	Trinitrotoluene
Substance Key:	5251
Contaminant ID (CASRN):	118967

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	6	5	3

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.0005**	**mg/kg-d**	**1988**	**Liver effects (increased relative & absolute liver weight, hepatocytic cloudy swelling & hepatocytomegaly)**	**Reference Dose; Basis = LOAEL 0.5 mg/kg-d, UF = 1000, dog (U.S. DOD, 1983)**
EPA HA RfD	0.0005	mg/kg-d	1995		Reference Dose; Oral, Int., UF = 1000, endpoint hepatic
RAISHE RfD	0.0005	mg/kg-d		Liver	Reference Dose; Basis = LOAEL, MF = 1, UF = 1000, dog (US DOD, 1983)
ATSDR (ITER), MRL	0.0005	mg/kg-d	1995		Minimal Risk Level; Int. Oral, Endpoint = hepatic, UF = 1000
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.12	mg/kg-d	1982	Liver - changes in liver weight, Endocrine - changes in spleen weight, Blood - changes in spleen	Lowest Observed Adverse Effect Level; oral study in mouse 13W-C; JTEHD6 Journal of Toxicology and Environmental Health. (Hemisphere Pub., 1025 Vermont Ave., NW, Washington, DC 20005) V.1-1975/76- Volume(issue)/page/year 9,565,1982
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}	0.1	mg/L			
RAISHE Slope Factor	0.03	$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification	C			Bladder	Oral, rat (US DOD, 1984a)
IARC Carcinogen Classification	3		1996		Vol. 65
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			EPA; RAISHE
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL	0.02		mg/L		Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	3.5	µg/L			
Health Reference Level (HRL)[2] cancer	1	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M - 10M	lbs/yr	1998			
	>1M - 10M	**lbs/yr**	**2002**			

Use	Explosive; chemical intermediate (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BFA**	**BFA = Biodegrades fast with acclimation (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	**1,834**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	1.6	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	5.48E-07	atm-m^3/mol		
Water Solubility	130	mg/L		
% water PBT profiler				

Contaminant	Triphenyl phosphite
Substance Key:	4154
Contaminant ID (CASRN):	101020

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	9	6	5

3-model Categorical Prediction
L?
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	**444**	**mg/kg**	**1981**	**Details of toxic effects not reported other than lethal dose value**	**(GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 46(12),13,1981)**
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Chemical intermediate; antioxidant/stabilizer; insecticide synergist (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**38 days**	**length of time**	**BSA**	**BSA = Biodegrades slow with acclimation (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.	6.62	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**2**			

Contaminant	Tris(2,3-dibromopropyl) phosphate
Substance Key:	5620
Contaminant ID (CASRN):	126727

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
7	8	1	2

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)	**2.3**	**$(mg/kg\text{-}d)^{-1}$**			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2A		1999		Vol. 20, Suppl. 7, Vol. 71; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC; OEHHA
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer	0.0152	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	0	lbs/yr	0	States	2004	
TRI Release - total	**500**	**lbs/yr**	**1**	**States**	**2004**	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr	1998			
		lbs/yr	2002			

Use	No longer used in the US; former flame retardant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	5,100	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	4.29	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.60E-05	atm-m^3/mol		
Water Solubility	8	mg/L		
% water PBT profiler	8			

Contaminant	Tris(2-chloroethyl) phosphite
Substance Key:	6020
Contaminant ID (CASRN):	140089

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	9	6	8

3-model Categorical Prediction
L
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50	**100**	**mg/kg**	**1996**	**Details of toxic effects not reported other than lethal dose value**	**Oral, rat (Lewis, R.J. Saxs Dangerous Properties of Industrial Materials. 9th ed. Volumes 1-3. New York, NY: Van Nostrand Reinhold, 1996., p. 2691)**
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Flame retardant (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**60 days**	**length of time**	**BST**	**BST = Biodegrades sometimes/recalcitrant (PBT)**
K_{OC}, Organic Carbon Partition Coefficient		L/kg		
log K_{OW}, Octanol Water Partition Coeff.		unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility		mg/L		
% water PBT profiler	**42**			

Contaminant	Tris(chloroethyl) phosphate
Substance Key:	5129
Contaminant ID (CASRN):	115968

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	8	10	4

3-model Categorical Prediction
L?
HRL Ratio(s)
NC HRL/NREC SW MED: 21,000 CAR HRL/NREC SW MED: 25

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.3	mg/kg-d		Brain - histological lesions. Also causes kidney tumors - adenomas and carcinomas	Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor	**0.014**	**$(mg/kg\text{-}d)^{-1}$**			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3				
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			RAIS
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	2,100	µg/L			
Health Reference Level (HRL)[2] cancer	2.5	µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water	**85**	**19**	**57.6**			**0.1**			**ug/L**	**National Reconnaissance**
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water			35			0.18			ug/L	National Aggregate
NREC ambient ground water			6.13			0.195			ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (HRL/NREC SW MED)	Non-cancer: 21,000				Cancer: 25				
Production	**Amount Range**	**Units**	**Year**						
CUSIUR Production Data	>1M - 10M	lbs/yr	1998						
	>1M - 10M	lbs/yr	2002						
Use	Flame-retardant in plastics and urethanes (HSDB)								

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	60 days	length of time	BST	BST = Biodegrades sometimes/recalcitrant (PBT)
K_{OC}, Organic Carbon Partition Coefficient	301	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.44	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	2.54E-08	atm-m^3/mol		
Water Solubility	7,000	mg/L		
% water PBT profiler	38			

Contaminant	Undecane
Substance Key:	10679
Contaminant ID (CASRN):	1120214

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	3	8	3

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL	**100**	**mg/kg-d**		**Salivation and decreased food consumption.**	**No Observed Effect Level**
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50	2,000	mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	700	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate
Application/Release	**Amount Released**	**Units**	**Number of States**	**Units**	**Year**	**Notes**				
NCFAP Pesticide Application - total		lbs/yr		States	1997					
TRI Release - surface water		lbs/yr		States	2004					
TRI Release - total		lbs/yr		States	2004					
Supplemental Water Data	**# PWSs/Sites sampled**	**# with Detects**	**% PWSs/Sites with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**	
HRL Ratios (No water data)	Non-cancer:				Cancer:					
Production	**Amount Range**	**Units**	**Year**							
CUSIUR Production Data	>50M - 100M	lbs/yr	1998							
	>100M - 500M	**lbs/yr**	**2002**							
Use	Gasoline constituent; research chemical; chemical intermediate (HSDB)									
Environmental Fate Parameters	**Value**	**Units**	**Degradation Code**	**Notes**						
$T_{1/2}$, Half life	**8.7 days**	**length of time**	**BF**	**BF = Biodegrades fast (PBT)**						
K_{OC}, Organic Carbon Partition Coefficient		L/kg								
log K_{OW}, Octanol Water Partition Coeff.	6.5	unitless								
Kd, Distribution coefficient		L/kg								
HLC, Henry's Law Constant	1.93	atm-m^3/mol								
Water Solubility	0.0044	mg/L								
% water PBT profiler	**18**									

Contaminant	Urea
Substance Key:	2307
Contaminant ID (CASRN):	57136

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
2	1	10	5

3-model Categorical Prediction
NL
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL	**3,600**	**mg/kg-d**	**2002**	**Drowsiness and diuresis (nonadverse)**	**Supplemental Data; OPP NOAEL (TRED)**
RTECS Lowest Oral Chronic LOAEL	200	mg/kg-d	1977	Behavioral - tremor, Behavioral - muscle weakness, Gastrointestinal - alteration in gastric secretion	Lowest Observed Adverse Effect Level; JANSAG Journal of Animal Science. (American Soc. of Animal Science, 309 W. Clark St., Champaign, IL 61820) V.1- 1942- Volume(issue)/page/year 45,566,1977
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	8,471	mg/kg	1986	Details of toxic effects not reported other than lethal dose value	GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 51(6),8,1986
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	25,200	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data	> 1B	lbs/yr	1998			
	> 1B	**lbs/yr**	**2002**			

Use	Chemical intermediate; in fertilizers; as medication; de-icer; formerly in pesticide formulations (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BF**	**BF = Biodegrades fast (BIODEG)**
K_{OC}, Organic Carbon Partition Coefficient	8	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	-2.11	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	1.74E-12	atm-m^3/mol		
Water Solubility	545,000	mg/L		
% water PBT profiler	**39**			

Contaminant	Vanadium pentoxide
Substance Key:	11141
Contaminant ID (CASRN):	1314621

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
4	1	5	8

3-model Categorical Prediction
NL - NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.009**	**mg/kg-d**	**1988**	**Decreased hair cystine content. Not an adverse effect. Decreased Potency Score by one integer**	**Reference Dose; Basis = NOAEL 0.89 mg/kg-d, rat, oral, UF = 100 (Stokinger et al., 1953)**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.009	mg/kg-d		Decreased hair cystine content	Reference Dose; Basis = NOAEL, MF = 1, rat, UF = 100 (Stokinger et al., 1953)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.5	mg/kg-d	1961	Behavioral - alteration of operant conditioning	Lowest Observed Adverse Effect Level; oral study in rat 26W-I; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936- Volume(issue)/page/year 26(10),6,1961
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	63	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water										
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:	

Production	Amount Range	Units	Year			
CUSIUR Production Data		lbs/yr				
	>1M - 10M	**lbs/yr**	**1986**			

Use	Chemical intermediate; catalyst (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		**length of time**	**BST**	**assumed persistent; BST = Biodegrades sometimes/recalcitrant**
K_{OC}, Organic Carbon Partition Coefficient	**193**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	2.97	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant		atm-m^3/mol		
Water Solubility	156	mg/L		
% water PBT profiler	39			

Contaminant	Vernolate
Substance Key:	12434
Contaminant ID (CASRN):	1929777

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
6	3	7	5

3-model Categorical Prediction
NL?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD	**0.001**	**mg/kg-d**	**1986**	**Decreased body weight in parental animals**	**Reference Dose; Basis = NOEL 1 mg/kg-d, UF = 1000, rat, oral (Stauffer Chemical Co., 1983)**
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	0.001	mg/kg-d		Decreased weight	Reference Dose; Basis = NOEL/LEL, rat, whole body, MF = 1, UF = 1000 (Stauffer Chemical Co., 1983)
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50	1,200	mg/kg	1991	Details of toxic effects not reported other than lethal dose value	Rat; FMCHA2 Farm Chemicals Handbook. (Meister Pub., 37841 Euclid Ave., Willoughy, OH 44094) Volume(issue)/page/year -,C321,1991
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg-d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg-d)^{-1}$			
EPA Slope Factor		$(mg/kg-d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification					
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total	**181,789**	**lbs/yr**	**9**	**States**	**1997**	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data		lbs/yr	1998
		lbs/yr	2002

Use	Former herbicide (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	38	length of time	BSA	BSA = Biodegrades slow with acclimation (PBT)
K_{OC}, Organic Carbon Partition Coefficient	425	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	3.84	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	3.08E-05	atm-m^3/mol		
Water Solubility	90	mg/L		
% water PBT profiler	16			

Contaminant	Vinyl acetate
Substance Key:	4660
Contaminant ID (CASRN):	108054

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
3	3	1	1

3-model Categorical Prediction
NL
HRL Ratio(s)
No data for calculating HRL ratio

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**1**	**mg/kg-d**		**Altered weight**	**Reference Dose; Basis = NOAEL, MF = 1, UF = 100, rat, whole body (US EPA, 1989)**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL	0.1	mg/kg-d	1966	Behavioral - alteration of classical conditioning	Lowest Observed Adverse Effect Level; oral study in rat; GISAAA Gigiena i Sanitariya. For English translation, see HYSAAV. (V/O Mezhdunarodnaya Kniga, 113095 Moscow, USSR) V.1- 1936-
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2B		1995		Vol. 63; Cancer classifications were used for screening, but no related quantitative cancer risk data were identified for potency scoring.
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N	1995		IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	7,000	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water	**794**	**0**	**0**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**Not Detected**	**ug/L**	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance

	# Samples	# with Detects	% Samples with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water	16,057	lbs/yr	8	States	2004	
TRI Release - total	3,068,589	lbs/yr	35	States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No data for calculating HRL ratio)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	> 1B	lbs/yr	1998
	> 1B	lbs/yr	2002

Use	Polymer intermediate; in hairspray (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life		length of time	BFA	BFA = Biodegrades fast with acclimation (BIODEG)
K_{OC}, Organic Carbon Partition Coefficient	6.13	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	0.73	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.000511	atm-m^3/mol		
Water Solubility	20,000	mg/L		
% water PBT profiler				

Contaminant	Vinyl fluoride
Substance Key:	2618
Contaminant ID (CASRN):	75025

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
		5	8

Incomplete data for scoring

3-model Categorical Prediction
HRL Ratio(s)
No HRL; No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD		mg/kg-d			Reference Dose
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	2A		1995		Vol. 63
Other Supporting Data					
Is contaminant on list of carcinogens?	Y	Y/N			CACART; IARC
Is the contaminant on a list of reproductive toxins?		Y/N			
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]		µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No HRL; No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year			
CUSIUR Production Data	>1M-10M	lbs/yr	1998			
	>1M-10M	**lbs/yr**	**2002**			

Use	Polymer intermediate (HSDB); gas

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15 days**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	24	L/kg		
log K_{OW}, Octanol Water Partition Coeff.	1.2	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.12	atm-m^3/mol		
Water Solubility	12,99	mg/L		
% water PBT profiler	**61**			

Contaminant	Vinyltoluene
Substance Key:	28159
Contaminant ID (CASRN):	25013154

Attribute Scores			
Potency	Severity	Prevalence	Magnitude
5	6	6	7

3-model Categorical Prediction
L?
HRL Ratio(s)
No water data

HEALTH EFFECTS DATA[1]

Non-cancer data	Value	Units	Date	Critical Effect	Notes
EPA OPP RfD		mg/kg-d			Reference Dose
EPA IRIS (ITER) RfD		mg/kg-d			Reference Dose
EPA HA RfD		mg/kg-d			Reference Dose
RAISHE RfD	**0.006**	**mg/kg-d**		**Nasal cavity- lesions**	**Reference Dose; Basis = LOAEL, MF = 1, UF = 1000, mouse, nasal cavity (US EPA, 1987)**
ATSDR (ITER), MRL		mg/kg-d			Minimal Risk Level
JMPR, maximum ADI		mg/kg-d			Acceptable Daily Intake
CEDIADI, ADI		mg/kg-d			Acceptable Daily Intake
ITER, TDI		mg/kg-d			Tolerable Daily Intake
Supplemental RfD-like value		mg/kg-d			Supplemental Data
CTDJPN Highest Chronic NOEL		mg/kg-d			No Observed Effect Level
Supplemental NOEL		mg/kg-d			Supplemental Data
RTECS Lowest Oral Chronic LOAEL		mg/kg-d			Lowest Observed Adverse Effect Level
Supplemental LOAEL		mg/kg-d			Supplemental Data
HSDB Lowest Oral LD50		mg/kg			
CTDJPN Lowest Oral LD50		mg/kg			
RTECS Lowest Oral LD50		mg/kg			
Cancer Data					
EPA Lifetime Cancer Risk, 10^{-4}		mg/L			
RAISHE Slope Factor		$(mg/kg\text{-}d)^{-1}$			
OEHHA Slope Factor (oral)		$(mg/kg\text{-}d)^{-1}$			
EPA Slope Factor		$(mg/kg\text{-}d)^{-1}$			
EPA Carcinogen classification					
IARC Carcinogen Classification	3		1994		Vol. 60
Other Supporting Data					
Is contaminant on list of carcinogens?		Y/N			
Is the contaminant on a list of reproductive toxins?	Y	Y/N		Teratogen	UMD
EPAHA-DWEL					Drinking Water Equivalent Level
Health Reference Level (HRL)[2]	42	µg/L			
Health Reference Level (HRL)[2] cancer		µg/L			

[1] Bolded data indicate value was used in attribute scoring

[2] For the CCL process HRLs were calculated by converting the RfD or other dose to ug/L, assuming 2 L/day of water consumed by a 70 Kg adult, and a Relative Source Contribution of 20%. For carcinogens, the concentration at the 10^{-6} cancer risk was used.

OCCURRENCE DATA[1]

	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	90% of Detects	99% of Detects	Units for Mag data	Notes
Finished Water Occurrence Data										
UCMR finished water									ug/L	
NCOD Round 1 finished water									ug/L	
NCOD Round 2 finished water									ug/L	
NIRS finished water									ug/L	
Ambient Water Occurrence Data										
NAWQA ambient water									ug/L	
NREC ambient surface water									ug/L	National Reconnaissance
NREC ambient ground water									ug/L	National Reconnaissance
	# Samples	**# with Detects**	**% Samples with detects**	**Minimum value of Detects**	**Maximum value of Detects**	**Median value of Detects**	**90% of Detects**	**99% of Detects**	**Units for Mag data**	**Notes**
NREC ambient surface water									ug/L	National Aggregate
NREC ambient ground water									ug/L	National Aggregate

Application/Release	Amount Released	Units	Number of States	Units	Year	Notes
NCFAP Pesticide Application - total		lbs/yr		States	1997	
TRI Release - surface water		lbs/yr		States	2004	
TRI Release - total		lbs/yr		States	2004	

Supplemental Water Data	# PWSs/Sites sampled	# with Detects	% PWSs/Sites with detects	Minimum value of Detects	Maximum value of Detects	Median value of Detects	99% of Detects	Units for Mag data	Notes

HRL Ratios (No water data)	Non-cancer:	Cancer:

Production	Amount Range	Units	Year
CUSIUR Production Data	>10M - 50M	lbs/yr	1998
	>10M - 50M	**lbs/yr**	**2002**

Use	Polymer intermediate; insecticide component (HSDB)

Environmental Fate Parameters	Value	Units	Degradation Code	Notes
$T_{1/2}$, Half life	**15**	**length of time**	**BS**	**BS = Biodegrades slow (PBT)**
K_{OC}, Organic Carbon Partition Coefficient	**817**	**L/kg**		
log K_{OW}, Octanol Water Partition Coeff.	3.48	unitless		
Kd, Distribution coefficient		L/kg		
HLC, Henry's Law Constant	0.00785	atm-m^3/mol		
Water Solubility	89	mg/L		
% water PBT profiler				