SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acenaphthene
CAS Number: 000083-32-9

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	6.0E-2	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	5.0E+1	µg/L	ECOTOX
Salt Ecol LC50:	1.7E+2	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.1E+2	days	THOMAS
Photolysis:	2.5E+0	days	FATERATE
Biodeg:	1.0E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	1.3E+0	days	THOMAS
Photolysis:	2.5E+0	days	FATERATE
Biodeg:	1.0E+2	days	FATERATE
Radio:		days	
Log Kow:	3.9E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.5E+2	
Density:	1.2E+0	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	2.5E-3	Torr	CHEMFATE
Henry's Law:	1.6E-4	atm-m3/mol	CHEMFATE
Water Solub:	3.6E+0	mg/L	CHEMFATE
Distrib Coef:	1.1E+3	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	3.9E+2		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	3.9E+2		ECOTOX
Salt BCF:			
Log Kow:	3.9E+0		CHEMFATE
Water Solub:	3.6E+0		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	9.3E+1	C
Boiling Point:	2.8E+2	C
Formula:	C12 H10	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acenaphthene
CAS Number: 000083-32-9

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10
Gas Mobility:	0.2000
Gas Migration:	11

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10
Water Solub:		3.6E+0
Distrib:		1.1E+3
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-1
	Non Karst:	2.0E-5

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.4000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	1000
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	2.2E+0	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	4.7E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	2.2E+0	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	8.1E+1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acenaphthylene
CAS Number: 000208-96-8

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.1E+2	days	THOMAS
Photolysis:		days	
Biodeg:	6.0E+1	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	1.4E+0	days	THOMAS
Photolysis:		days	
Biodeg:	6.0E+1	days	FATERATE
Radio:		days	
Log Kow:	4.1E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.5E+2	
Density:	9.0E-1	g/mL @ 16.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	9.1E-4	Torr	CHEMFATE
Henry's Law:	1.1E-4	atm-m3/mol	CHEMFATE
Water Solub:	1.6E+1	mg/L	CHEMFATE
Distrib Coef:	1.5E+3	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:	4.1E+0		CHEMFATE
Water Solub:	1.6E+1		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	9.3E+1	C
Boiling Point:	2.8E+2	C
Formula:	C12 H8	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acenaphthylene
CAS Number: 000208-96-8

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	0
Gas Mobility:	0.0200
Gas Migration:	11

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		0
Water Solub:		1.6E+1
Distrib:		1.5E+3
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-1
	Non Karst:	2.0E-5

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	0

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	0
Persistence	
River:	0.4000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	0
Persistence	
River:	0.4000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	0.4000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acetone
CAS Number: 000067-64-1

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	9.0E-1	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	5.3E+3	mg/kg	ACGIH
Dermal LD50:	2.0E+4	mg/kg	ACGIH
Gas Inhal LC50:		ppm	
Dust Inhal LC50:	3.7E+1	mg/L	RTECS
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.0E+4	µg/L	ECOTOX
Salt Ecol LC50:	1.9E+6	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.2E+0	days	THOMAS
Photolysis:	5.7E-1	days	CHEMFATE
Biodeg:	7.0E+0	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	1.2E+0	days	THOMAS
Photolysis:	5.7E-1	days	CHEMFATE
Biodeg:	7.0E+0	days	FATERATE
Radio:		days	
Log Kow:	-2.4E-1		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	5.8E+1	
Density:	7.9E-1	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	2.3E+2	Torr	CHEMFATE
Henry's Law:	3.9E-5	atm-m3/mol	CHEMFATE
Water Solub:	1.0E+6	mg/L	CHEMFATE
Distrib Coef:	8.7E-2	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:	-2.4E-1		CHEMFATE
Water Solub:	1.0E+6		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-9.5E+1	C
Boiling Point:	5.6E+1	C
Formula:	C3 H6 O	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acetone
CAS Number: 000067-64-1

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	1
Gas Mobility:	1.0000
Gas Migration:	17

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		1
Water Solub:		1.0E+6
Distrib:		8.7E-2
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	1

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	1
Persistence	
River:	0.0700
Lake:	0.0700

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	1
Persistence	
River:	0.0700
Lake:	0.0700
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	100
Salt Tox:	1
Persistence	
River:	0.0700
Lake:	0.0700
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	3.3E+1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	7.0E+4	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	3.3E+1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	1.2E+3	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acrolein
CAS Number: 000107-02-8

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	5.0E-4	mg/kg/day	IRIS
Inhal RfD:	5.7E-6	mg/kg/day	IRIS
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	4.6E+1	mg/kg	ACGIH
Dermal LD50:	5.6E+2	mg/kg	ACGIH
Gas Inhal LC50:	6.6E+1	ppm	RTECS
Dust Inhal LC50:	1.5E+1	mg/L	RTECS
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	6.0E+0	µg/L	ECOTOX
Salt Ecol LC50:	2.7E+2	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	5.0E-1	days	THOMAS
Photolysis:		days	
Biodeg:	2.8E+1	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	5.0E-1	days	THOMAS
Photolysis:		days	
Biodeg:	2.8E+1	days	FATERATE
Radio:		days	
Log Kow:	-1.0E-2		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	5.6E+1	
Density:	8.4E-1	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	2.7E+2	Torr	CHEMFATE
Henry's Law:	1.2E-4	atm-m3/mol	CHEMFATE
Water Solub:	2.1E+5	mg/L	CHEMFATE
Distrib Coef:	1.5E-1	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	3.4E+2		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	3.4E+2		ECOTOX
Salt BCF:			
Log Kow:	-1.0E-2		CHEMFATE
Water Solub:	2.1E+5		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-8.8E+1	C
Boiling Point:	5.3E+1	C
Formula:	C3 H4 O	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acrolein
CAS Number: 000107-02-8

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	1.0000
Gas Migration:	17

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		2.1E+5
Distrib:		1.5E-1
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	0.0700
Lake:	0.0700

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	0.0700
Lake:	0.0700
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	1000
Persistence	
River:	0.0700
Lake:	0.0700
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:	2.1E-5	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.8E-2	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	3.9E+1	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.8E-2	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	6.8E-1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acrylamide
CAS Number: 000079-06-1

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	2.0E-4	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:	4.5E+0	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2		
Inhal Slope:	4.5E+0	(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	B2		
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	1.5E+2	mg/kg	ACGIH
Dermal LD50:	4.0E+2	mg/kg	RTECS
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	4.0E+4	µg/L	ECOTOX
Salt Ecol LC50:	2.4E+4	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:	1.4E+4	days	CHEMFATE
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:	1.4E+4	days	CHEMFATE
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	-6.7E-1		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	7.1E+1	
Density:	1.1E+0	g/mL @ 30.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	7.0E-3	Torr	CHEMFATE
Henry's Law:	1.0E-9	atm-m3/mol	CHEMFATE
Water Solub:	6.4E+5	mg/L	CHEMFATE
Distrib Coef:	3.3E-2	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.6E+0		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	1.6E+0		ECOTOX
Salt BCF:			
Log Kow:	-6.7E-1		CHEMFATE
Water Solub:	6.4E+5		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	8.5E+1	C
Boiling Point:	1.9E+2	C
Formula:	C3 H5 N O	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Acrylamide
CAS Number: 000079-06-1

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	0.2000
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		6.4E+5
Distrib:		3.3E-2
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	5.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10
Salt Tox:	10
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	5.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	1.9E-6	mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.9E-5	mg/L
Non Cancer Risk:	7.3E-3	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	1.4E-1	mg/kg
Non Cancer Risk:	1.6E+1	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.9E-5	mg/L
Non Cancer Risk:	7.3E-3	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	7.0E-4	mg/kg
Non Cancer Risk:	2.7E-1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Alachlor
CAS Number: 015972-60-8

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	1.0E-2	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:	8.0E-2	(mg/kg/day)^-1	HEAST
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	9.3E+2	mg/kg	RTECS
Dermal LD50:	1.2E+4	mg/kg	RTECS
Gas Inhal LC50:		ppm	
Dust Inhal LC50:	1.9E+5	mg/L	RTECS
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.5E+2	µg/L	ECOTOX
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	3.5E+0		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	2.7E+2	
Density:	1.1E+0	g/mL @ 25.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	2.2E-5	Torr	PHYSPROP
Henry's Law:	8.3E-9	atm-m3/mol	PHYSPROP
Water Solub:	2.4E+2	mg/L	PHYSPROP
Distrib Coef:	4.4E+2	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	5.0E+1		ECOTOX
Salt BCF:			
Log Kow:	3.5E+0		PHYSPROP
Water Solub:	2.4E+2		PHYSPROP
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	4.0E+1	C
Boiling Point:	1.0E+2	C
Formula:	C14 H20 Cl N O2	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Alachlor
CAS Number: 015972-60-8

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	100
Gas Mobility:	0.0200
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		100
Water Solub:		2.4E+2
Distrib:		4.4E+2
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	100

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	100
Persistence	
River:	0.4000
Lake:	0.0700

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	100
Persistence	
River:	0.4000
Lake:	0.0700
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	0.4000
Lake:	0.0700
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	2.0E-3	mg/L
Cancer Risk:	1.1E-3	mg/L
Non Cancer Risk:	3.6E-1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	8.0E+0	mg/kg
Non Cancer Risk:	7.8E+2	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	2.0E-3	mg/L
Cancer Risk:	1.1E-3	mg/L
Non Cancer Risk:	3.6E-1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	3.9E-2	mg/kg
Non Cancer Risk:	1.4E+1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Aldrin
CAS Number: 000309-00-2

TOXICITY

Parameter	Value		Unit	Source
Oral RfD:	3.0E-5		mg/kg/day	IRIS
Inhal RfD:			mg/kg/day	
Oral Slope:	1.7E+1		(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2			
Inhal Slope:	1.7E+1		(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	B2			
Oral ED10:	4.2E-3		mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B2			
Inhal ED10:	4.2E-3		mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B2			
Oral LD50:	6.0E+1		mg/kg	ACGIH
Dermal LD50:	3.9E+1		mg/kg	ACGIH
Gas Inhal LC50:			ppm	
Dust Inhal LC50:	4.8E+0		mg/L	RTECS
ACUTE		G		
Fresh CMC:	3.0E+0	G	µg/L	WATCRIT
Salt CMC:	1.3E+0		µg/L	WATCRIT
CHRONIC				
Fresh CCC:			µg/L	
Salt CCC:			µg/L	
Fresh Ecol LC50:	9.7E-2		µg/L	ECOTOX
Salt Ecol LC50:	5.1E-1		µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:	7.6E+2	days	CHEMFATE
Volatility:	1.7E+2	days	THOMAS
Photolysis:		days	
Biodeg:	5.9E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:	7.6E+2	days	CHEMFATE
Volatility:	2.9E+0	days	THOMAS
Photolysis:		days	
Biodeg:	5.9E+2	days	FATERATE
Radio:		days	
Log Kow:	5.5E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	Yes		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	3.6E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	6.0E-6	Torr	CHEMFATE
Henry's Law:	1.7E-4	atm-m3/mol	CHEMFATE
Water Solub:	1.7E-2	mg/L	CHEMFATE
Distrib Coef:	3.7E+5	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	3.9E+3		ECOTOX
Salt BCF:	9.6E+4		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	1.4E+5		ECOTOX
Salt BCF:	9.6E+4		ECOTOX
Log Kow:	5.5E+0		CHEMFATE
Water Solub:	1.7E-2		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	1.0E+2	C
Boiling Point:		C
Formula:	C12 H8 Cl6	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Aldrin
CAS Number: 000309-00-2

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	0.0020
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		1.7E-2
Distrib:		3.7E+5
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-3
	Non Karst:	2.0E-7

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	5.0E-7	mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	5.0E-6	mg/L
Non Cancer Risk:	1.1E-3	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	3.8E-2	mg/kg
Non Cancer Risk:	2.3E+0	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	5.0E-6	mg/L
Non Cancer Risk:	1.1E-3	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:	3.0E-1	ppm
Cancer Risk:	1.9E-4	mg/kg
Non Cancer Risk:	4.1E-2	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:	3.0E+0 G	µg/L
Salt CMC:	1.3E+0 G	µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Aluminum
CAS Number: 007429-90-5

TOXICITY

Parameter	Value		Unit	Source
Oral RfD:			mg/kg/day	
Inhal RfD:			mg/kg/day	
Oral Slope:			(mg/kg/day)^-1	
Oral Wt-of-Evid:				
Inhal Slope:			(mg/kg/day)^-1	
Inhal Wt-of-Evid:				
Oral ED10:			mg/kg/day	
Oral ED10 Wgt:				
Inhal ED10:			mg/kg/day	
Inhal ED10 Wgt:				
Oral LD50:			mg/kg	
Dermal LD50:			mg/kg	
Gas Inhal LC50:			ppm	
Dust Inhal LC50:			mg/L	
ACUTE				
Fresh CMC:	7.5E+2	G2, I2	µg/L	WATCRIT
Salt CMC:			µg/L	
CHRONIC				
Fresh CCC:	8.7E+1	G2, I2, L2	µg/L	WATCRIT
Salt CCC:			µg/L	
Fresh Ecol LC50:	1.2E+2		µg/L	ECOTOX
Salt Ecol LC50:			µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:			

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	2.7E+1		
Density:	2.7E+0	g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	9.9E+0	ml/g	DITOR_KD
Geo Mean Sol:	9.5E+4	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	3.6E+1		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	6.6E+3		ECOTOX
Salt BCF:			
Log Kow:			
Water Solub:			
Geo Mean Sol:	9.5E+4	mg/L	CALC

OTHER DATA

Melting Point:	6.6E+2	C
Boiling Point:	2.5E+3	C
Formula:	Al	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Aluminum
CAS Number: 007429-90-5

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	0
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		0
Water Solub:		
Distrib:		9.9E+0
Geo Mean Sol:		9.5E+4
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	0

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	0
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	100
Salt Tox:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5000.0
Salt:	5000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:	7.5E+2 [G2, I2]	µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:	8.7E+1 [G2, I2, L2]	µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Americium
CAS Number: 007440-35-9

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:			
Oral Wt-of-Evid:			
Inhal Slope:			
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:			

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	Yes	
Organic:	No	
Gas:	No	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	Yes	
Molecular Weight:	2.4E+2	
Density:	1.2E+1	g/mL @

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	8.2E+0	ml/g	SSG-Rad
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:			
Water Solub:			
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	1.2E+3	C
Boiling Point:	2.0E+3	C
Formula:	Am	

CLASS INFORMATION

Class	Parent Substance

HRS factor values are assigned to radioactive isotopes but not to radioactive elements. Data for a radioactive element is used to derive factor values for that element's isotopes.

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Americium 241 **CAS Number:** 014596-10-2

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	Food: 1.34E-10	(pCi)^-1	HEAST
	Soil: 2.17E-10	(pCi)^-1	HEAST
	Water: 1.04E-10	(pCi)^-1	HEAST
Oral Wt-of-Evid:	A		
Inhal Slope:	2.8E-8	(pCi)^-1	HEAST
Inhal Wt-of-Evid:	A		
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:	1.6E+5	days	SSG-Rad
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:	1.6E+5	days	SSG-Rad
Log Kow:			

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	Yes	
Organic:	No	
Gas:	No	
Particulate:	Yes	
Radionuclide:	Yes	
Rad. Element:	No	
Molecular Weight:	2.4E+2	
Density:		@

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	6.8E+2	ml/g	BAES_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:			
Water Solub:			
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:
Boiling Point:
Formula: Am-241

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Americium 241 **CAS Number:** 014596-10-2

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		6.8E+2
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	
	Non Karst:	

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:	1.5E+1	pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:	1.7E-4	pCi/m3
DW:	4.6E-1	pCi/L
FC:	1.3E+1	pCi/kg
Soil Ing:	3.7E+3	pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Aniline
CAS Number: 000062-53-3

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:	2.9E-4	mg/kg/day	IRIS
Oral Slope:	5.7E-3	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	4.4E+2	mg/kg	ACGIH
Dermal LD50:	8.4E+2	mg/kg	RTECS
Gas Inhal LC50:	1.8E+2	ppm	RTECS
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	2.5E+1	µg/L	ECOTOX
Salt Ecol LC50:	2.9E+4	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	9.7E+1	days	THOMAS
Photolysis:	2.6E+0	days	CHEMFATE
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	1.3E+1	days	THOMAS
Photolysis:	2.6E+0	days	CHEMFATE
Biodeg:		days	
Radio:		days	
Log Kow:	9.0E-1		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	9.3E+1	
Density:	1.0E+0	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	4.9E-1	Torr	CHEMFATE
Henry's Law:	1.9E-6	atm-m3/mol	CHEMFATE
Water Solub:	3.6E+4	mg/L	CHEMFATE
Distrib Coef:	1.2E+0	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	2.0E+1		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	2.8E+2		ECOTOX
Salt BCF:			
Log Kow:	9.0E-1		CHEMFATE
Water Solub:	3.6E+4		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-6.0E+0	C
Boiling Point:	1.8E+2	C
Formula:	C6H7N	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Aniline
CAS Number: 000062-53-3

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	1.0000
Gas Migration:	11

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		3.6E+4
Distrib:		1.2E+0
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	0.4000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	0.4000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	10
Persistence	
River:	1.0000
Lake:	0.4000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:	1.0E-3	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.5E-2	mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	1.1E+2	mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.5E-2	mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	5.5E-1	mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Anthracene
CAS Number: 000120-12-7

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	3.0E-1	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.0E+0	µg/L	ECOTOX
Salt Ecol LC50:	3.6E+0	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.2E+2	days	THOMAS
Photolysis:	3.1E-2	days	CHEMFATE
Biodeg:	6.3E+0	days	CHEMFATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	1.8E+0	days	THOMAS
Photolysis:	3.1E-2	days	CHEMFATE
Biodeg:	6.3E+0	days	CHEMFATE
Radio:		days	
Log Kow:	4.5E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.8E+2	
Density:	1.3E+0	g/mL @ 25.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	2.7E-6	Torr	CHEMFATE
Henry's Law:	6.5E-5	atm-m3/mol	CHEMFATE
Water Solub:	4.3E-2	mg/L	CHEMFATE
Distrib Coef:	4.5E+3	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.7E+4		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	1.7E+4		ECOTOX
Salt BCF:			
Log Kow:	4.5E+0		CHEMFATE
Water Solub:	4.3E-2		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	2.2E+2	C
Boiling Point:	3.4E+2	C
Formula:	C14 H10	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Anthracene
CAS Number: 000120-12-7

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10
Gas Mobility:	0.0020
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10
Water Solub:		4.3E-2
Distrib:		4.5E+3
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-3
	Non Karst:	2.0E-7

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.4000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	10000
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.1E+1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	2.3E+4	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.1E+1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	4.1E+2	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Antimony
CAS Number: 007440-36-0

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	4.0E-4	mg/kg/day	IRIS
Inhal RfD:	1.1E-4	mg/kg/day	STSC
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	7.0E+3	mg/kg	RTECS
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:	4.2E+3	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	7.3E-1		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	Yes	
Organic:	No	
Gas:	No	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.2E+2	
Density:	6.7E+0	g/mL @ 25.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:	2.5E-2	atm-m3/mol	PHYSPROP
Water Solub:		mg/L	
Distrib Coef:	4.5E+1	ml/g	BAES_KD
Geo Mean Sol:	1.7E+5	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.0E+0		VER_BCF
Salt BCF:	4.4E+0		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	1.0E+0		VER_BCF
Salt BCF:	1.7E+1		ECOTOX
Log Kow:	7.3E-1		PHYSPROP
Water Solub:			
Geo Mean Sol:	1.7E+5	mg/L	CALC

OTHER DATA

Melting Point:	6.3E+2	C
Boiling Point:	1.6E+3	C
Formula:	Sb	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Antimony
CAS Number: 007440-36-0

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		4.5E+1
Geo Mean Sol:		1.7E+5
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	5.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	100
Salt Tox:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	50.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:	4.2E-4	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	6.0E-3	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.5E-2	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	3.1E+1	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	6.0E-3	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.5E-2	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	5.4E-1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Antimony 125(+D) (radionuclide) **CAS Number:** 014234-35-6

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	Food: 7.21E-12	(pCi)^-1	HEAST
	Soil: 1.32E-11	(pCi)^-1	HEAST
	Water: 5.13E-12	(pCi)^-1	HEAST
Oral Wt-of-Evid:	A		
Inhal Slope:	1.9E-11	(pCi)^-1	HEAST
Inhal Wt-of-Evid:	A		
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:	1.1E+3	days	SSG-Rad
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:	1.1E+3	days	SSG-Rad
Log Kow:	7.3E-1		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	Yes	
Organic:	No	
Gas:	No	
Particulate:	Yes	
Radionuclide:	Yes	
Rad. Element:	No	
Molecular Weight:	1.2E+2	
Density:	6.7E+0	g/mL @ 25.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	4.5E+1	ml/g	BAES_KD
Geo Mean Sol:	1.7E+5	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.0E+0		VER_BCF
Salt BCF:	4.4E+0		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	1.0E+0		VER_BCF
Salt BCF:	1.7E+1		ECOTOX
Log Kow:	7.3E-1		PHYSPROP
Water Solub:			
Geo Mean Sol:	1.7E+5	mg/L	CALC

OTHER DATA

Melting Point:	6.3E+2	C
Boiling Point:	1.8E+3	C
Formula:	Sb-109(+D)	

CLASS INFORMATION

Class	Parent Substance
GW Mob:	007440-36-0
Other:	007440-36-0

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Antimony 125(+D) (radionuclide) **CAS Number:** 014234-35-6

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	1000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		1000
Water Solub:		
Distrib:		4.5E+1
Geo Mean Sol:		1.7E+5
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	1000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	1000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	5.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	50.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:	3.0E+2	pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:	2.5E-1	pCi/m3
DW:	9.3E+0	pCi/L
FC:	2.4E+2	pCi/kg
Soil Ing:	6.0E+4	pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Arsenic
CAS Number: 007440-38-2

TOXICITY

Parameter	Value		Unit	Source
Oral RfD:	3.0E-4		mg/kg/day	IRIS
Inhal RfD:			mg/kg/day	
Oral Slope:	1.5E+0		(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	A			
Inhal Slope:	1.5E+1		(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	A			
Oral ED10:	7.0E-3		mg/kg/day	EPA_ED10
Oral ED10 Wgt:	A			
Inhal ED10:	7.0E-3		mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	A			
Oral LD50:			mg/kg	
Dermal LD50:			mg/kg	
Gas Inhal LC50:			ppm	
Dust Inhal LC50:			mg/L	
ACUTE				
Fresh CMC:	3.4E+2	A, D, K	µg/L	WATCRIT
Salt CMC:	6.9E+1	A, D, bb	µg/L	WATCRIT
CHRONIC				
Fresh CCC:	1.5E+2	A, D, K	µg/L	WATCRIT
Salt CCC:	3.6E+1	A, D, bb	µg/L	WATCRIT
Fresh Ecol LC50:	1.5E+3		µg/L	ECOTOX
Salt Ecol LC50:	3.9E+2		µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	6.8E-1		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	7.5E+1		
Density:	5.8E+0	g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:	7.7E-1	atm-m3/mol	PHYSPROP
Water Solub:		mg/L	
Distrib Coef:	2.9E+1	ml/g	SSG_KD
Geo Mean Sol:	1.2E+5	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	4.0E+0		VER_BCF
Salt BCF:	3.5E+2		VER_BCF
ENVIRONMENTAL			
Fresh BCF:	8.7E+3		ECOTOX
Salt BCF:	3.5E+2		VER_BCF
Log Kow:	6.8E-1		PHYSPROP
Water Solub:			
Geo Mean Sol:	1.2E+5	mg/L	CALC

OTHER DATA

Melting Point:	8.2E+2	C
Boiling Point:	6.0E+2	C
Formula:	As	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Arsenic
CAS Number: 007440-38-2

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		2.9E+1
Geo Mean Sol:		1.2E+5
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10
Salt Tox:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5000.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	5.7E-7	mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	1.0E-2	mg/L
Cancer Risk:	5.7E-5	mg/L
Non Cancer Risk:	1.1E-2	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	4.3E-1	mg/kg
Non Cancer Risk:	2.3E+1	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	1.0E-2	mg/L
Cancer Risk:	5.7E-5	mg/L
Non Cancer Risk:	1.1E-2	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	2.1E-3	mg/kg
Non Cancer Risk:	4.1E-1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:	3.4E+2 [A, D, K]	µg/L
Salt CMC:	6.9E+1 [A, D, bb]	µg/L
CHRONIC		
Fresh CCC:	1.5E+2 [A, D, K]	µg/L
Salt CCC:	3.6E+1 [A, D, bb]	µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Asbestos
CAS Number: 001332-21-4

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Unit Risk:	2.3E-1	fibers/mL	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:			

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:			
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	1.0E+3	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:			
Water Solub:			
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:		C
Boiling Point:		C
Formula:	mixture	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Asbestos
CAS Number: 001332-21-4

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		1.0E+3
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	
	Non Karst:	

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Inhal Unit Risk:	2.3E-1	fibers/mL
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	7.0E+0	million fibers/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	7.0E+0	million fibers/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Barium
CAS Number: 007440-39-3

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	7.0E-2	mg/kg/day	IRIS
Inhal RfD:	1.4E-4	mg/kg/day	HEAST
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	2.0E+3	mg/kg	ACGIH
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	3.2E+5	µg/L	ECOTOX
Salt Ecol LC50:	5.0E+5	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	2.3E-1		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	Yes	
Organic:	No	
Gas:	No	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.4E+2	
Density:	3.6E+0	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	4.1E+1	ml/g	SSG_KD
Geo Mean Sol:	2.8E+3	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:	7.0E+2		ECOTOX
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:	7.0E+2		ECOTOX
Log Kow:	2.3E-1		PHYSPROP
Water Solub:			
Geo Mean Sol:	2.8E+3	mg/L	CALC

OTHER DATA

Melting Point:	7.3E+2	C
Boiling Point:	1.9E+3	C
Formula:	Ba	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Barium
CAS Number: 007440-39-3

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		4.1E+1
Geo Mean Sol:		2.8E+3
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1
Salt Tox:	1
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:	5.2E-4	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	2.0E+0	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	2.6E+0	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	5.5E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	2.0E+0	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	2.6E+0	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	9.5E+1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benz(a)anthracene **CAS Number:** 000056-55-3

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	7.3E-1	(mg/kg/day)^-1	LIVECHEM
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:	4.7E-2	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B2		
Inhal ED10:	4.7E-2	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B2		
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.0E+1	µg/L	ECOTOX
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.4E+2	days	THOMAS
Photolysis:	2.5E-2	days	CHEMFATE
Biodeg:	6.8E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	4.5E+0	days	THOMAS
Photolysis:	2.5E-2	days	CHEMFATE
Biodeg:	6.8E+2	days	FATERATE
Radio:		days	
Log Kow:	5.7E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	Yes		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	2.3E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	1.1E-7	Torr	CHEMFATE
Henry's Law:	3.4E-6	atm-m3/mol	CHEMFATE
Water Solub:	9.4E-3	mg/L	CHEMFATE
Distrib Coef:	6.0E+4	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	1.0E+4		ECOTOX
Salt BCF:			
Log Kow:	5.7E+0		CHEMFATE
Water Solub:	9.4E-3		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	8.4E+1	C
Boiling Point:		C
Formula:	C18 H12	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benz(a)anthracene **CAS Number:** 000056-55-3

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	1000
Gas Mobility:	0.0020
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		1000
Water Solub:		9.4E-3
Distrib:		6.0E+4
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-5
	Non Karst:	2.0E-9

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	1000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	1000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.2E-4	mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	8.8E-1	mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.2E-4	mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	4.3E-3	mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzene
CAS Number: 000071-43-2

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	4.0E-3	mg/kg/day	IRIS
Inhal RfD:	8.6E-3	mg/kg/day	IRIS
Oral Slope:	5.5E-2	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	A		
Inhal Slope:	2.7E-2	(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	A		
Oral ED10:	3.7E+0	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	A		
Inhal ED10:	3.7E+0	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	A		
Oral LD50:	9.3E+2	mg/kg	RTECS
Dermal LD50:	4.8E+1	mg/kg	RTECS
Gas Inhal LC50:	1.0E+4	ppm	RTECS
Dust Inhal LC50:	1.5E+2	mg/L	RTECS
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.0E+3	µg/L	ECOTOX
Salt Ecol LC50:	1.0E+3	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	7.8E+1	days	THOMAS
Photolysis:	6.7E+2	days	CHEMFATE
Biodeg:	6.0E+0	days	CHEMFATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	8.4E-1	days	THOMAS
Photolysis:	6.7E+2	days	CHEMFATE
Biodeg:	6.0E+0	days	CHEMFATE
Radio:		days	
Log Kow:	2.1E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	7.8E+1	
Density:	8.8E-1	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	9.5E+1	Torr	CHEMFATE
Henry's Law:	5.6E-3	atm-m3/mol	CHEMFATE
Water Solub:	1.8E+3	mg/L	CHEMFATE
Distrib Coef:	1.2E-1	ml/g	SSG_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.4E+3		ECOTOX
Salt BCF:	8.5E+3		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	2.2E+3		ECOTOX
Salt BCF:	1.0E+4		ECOTOX
Log Kow:	2.1E+0		CHEMFATE
Water Solub:	1.8E+3		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	5.5E+0	C
Boiling Point:	8.0E+1	C
Formula:	C6 H6	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzene
CAS Number: 000071-43-2

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	1000
Gas Mobility:	1.0000
Gas Migration:	17

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		1000
Water Solub:		1.8E+3
Distrib:		1.2E-1
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	1000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	1000
Persistence	
River:	0.4000
Lake:	0.4000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	1000
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	5000.0
Salt:	5000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	5000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	3.1E-4	mg/m3
Non Cancer Risk:	3.1E-2	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	5.0E-3	mg/L
Cancer Risk:	1.5E-3	mg/L
Non Cancer Risk:	1.5E-1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	1.2E+1	mg/kg
Non Cancer Risk:	3.1E+2	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	5.0E-3	mg/L
Cancer Risk:	1.5E-3	mg/L
Non Cancer Risk:	1.5E-1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	5.7E-2	mg/kg
Non Cancer Risk:	5.4E+0	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzidine
CAS Number: 000092-87-5

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	3.0E-3	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:	2.3E+2	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	A		
Inhal Slope:	2.3E+2	(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	A		
Oral ED10:	4.5E-4	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	A		
Inhal ED10:	4.5E-4	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	A		
Oral LD50:	2.1E+2	mg/kg	RTECS
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	2.5E+3	µg/L	ECOTOX
Salt Ecol LC50:	4.0E+3	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:	8.0E+0	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:	8.0E+0	days	FATERATE
Radio:		days	
Log Kow:	1.7E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	Yes		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	1.8E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	8.0E-9	Torr	CHEMFATE
Henry's Law:	3.9E-11	atm-m3/mol	CHEMFATE
Water Solub:	5.0E+2	mg/L	CHEMFATE
Distrib Coef:	6.5E+0	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	4.4E+1		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	2.6E+3		ECOTOX
Salt BCF:			
Log Kow:	1.7E+0		CHEMFATE
Water Solub:	5.0E+2		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	1.2E+2	C
Boiling Point:	4.0E+2	C
Formula:	C12 H12 N2	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzidine
CAS Number: 000092-87-5

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	0.0002
Gas Migration:	0

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		5.0E+2
Distrib:		6.5E+0
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	0.4000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	0.4000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	100
Salt Tox:	100
Persistence	
River:	1.0000
Lake:	0.4000
Bioaccumulation	
Fresh:	5000.0
Salt:	5000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	3.6E-8	mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	3.7E-7	mg/L
Non Cancer Risk:	1.1E-1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	2.8E-3	mg/kg
Non Cancer Risk:	2.3E+2	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	3.7E-7	mg/L
Non Cancer Risk:	1.1E-1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	1.4E-5	mg/kg
Non Cancer Risk:	4.1E+0	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(a)pyrene
CAS Number: 000050-32-8

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	7.3E+0	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:	4.0E-3	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B2		
Inhal ED10:	4.0E-3	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B2		
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	5.0E+0	µg/L	ECOTOX
Salt Ecol LC50:	1.0E+3	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.8E+2	days	THOMAS
Photolysis:	2.3E-2	days	CHEMFATE
Biodeg:	5.3E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	3.6E+1	days	THOMAS
Photolysis:	2.3E-2	days	CHEMFATE
Biodeg:	5.3E+2	days	FATERATE
Radio:		days	
Log Kow:	6.0E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	Yes		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	2.5E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	5.5E-9	Torr	CHEMFATE
Henry's Law:	1.1E-6	atm-m3/mol	CHEMFATE
Water Solub:	1.6E-3	mg/L	CHEMFATE
Distrib Coef:	1.6E+5	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	2.9E+5		ECOTOX
Salt BCF:	9.6E+5		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	2.9E+5		ECOTOX
Salt BCF:	9.6E+5		ECOTOX
Log Kow:	6.0E+0		CHEMFATE
Water Solub:	1.6E-3		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	1.8E+2	C
Boiling Point:	3.1E+2	C
Formula:	C20 H12	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(a)pyrene
CAS Number: 000050-32-8

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	0.0002
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		1.6E-3
Distrib:		1.6E+5
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-5
	Non Karst:	2.0E-9

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	2.0E-4	mg/L
Cancer Risk:	1.2E-5	mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	8.8E-2	mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	2.0E-4	mg/L
Cancer Risk:	1.2E-5	mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	4.3E-4	mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(g,h,i)perylene **CAS Number:** 000191-24-2

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	4.6E+2	days	THOMAS
Photolysis:		days	
Biodeg:	6.5E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	2.9E+2	days	THOMAS
Photolysis:		days	
Biodeg:	6.5E+2	days	FATERATE
Radio:		days	
Log Kow:	6.6E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	2.8E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	1.0E-10	Torr	CHEMFATE
Henry's Law:	1.4E-7	atm-m3/mol	CHEMFATE
Water Solub:	2.6E-4	mg/L	CHEMFATE
Distrib Coef:	4.5E+5	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	2.8E+4		ECOTOX
Salt BCF:			
Log Kow:	6.6E+0		CHEMFATE
Water Solub:	2.6E-4		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:		C
Boiling Point:		C
Formula:	C22 H12	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(g,h,i)perylene
CAS Number: 000191-24-2

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	0
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		0
Water Solub:		2.6E-4
Distrib:		4.5E+5
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-5
	Non Karst:	2.0E-9

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	0

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	0
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(j,k)fluorene (Fluoranthene) **CAS Number:** 000206-44-0

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	4.0E-2	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	2.0E+3	mg/kg	RTECS
Dermal LD50:	3.2E+3	mg/kg	RTECS
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	9.0E-1	µg/L	ECOTOX
Salt Ecol LC50:	9.0E-2	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.3E+2	days	THOMAS
Photolysis:	2.6E+0	days	FATERATE
Biodeg:	4.4E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	3.5E+0	days	THOMAS
Photolysis:	2.6E+0	days	FATERATE
Biodeg:	4.4E+2	days	FATERATE
Radio:		days	
Log Kow:	5.0E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value			
Metal Contain:	No			
Organic:	Yes			
Gas:	Yes			
Particulate:	Yes			
Radionuclide:	No			
Rad. Element:	No			
Molecular Weight:	2.0E+2			
Density:	1.3E+0	g/mL	@ 0.00	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	7.8E-6	Torr	LIVECHEM
Henry's Law:	1.6E-5	atm-m3/mol	CHEMFATE
Water Solub:	2.1E-1	mg/L	CHEMFATE
Distrib Coef:	1.1E+4	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	3.8E+2		VER_BCF
Salt BCF:	5.9E+3		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	3.1E+3		ECOTOX
Salt BCF:	5.9E+3		ECOTOX
Log Kow:	5.0E+0		CHEMFATE
Water Solub:	2.1E-1		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	1.1E+2	C
Boiling Point:	3.8E+2	C
Formula:	C16 H10	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(j,k)fluorene (Fluoranthene) **CAS Number:** 000206-44-0

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	100
Gas Mobility:	0.0020
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		100
Water Solub:		2.1E-1
Distrib:		1.1E+4
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-3
	Non Karst:	2.0E-7

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	100

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	5000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5000.0
Salt:	5000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.5E+0	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	3.1E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.5E+0	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	5.4E+1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(k)fluoranthene **CAS Number:** 000207-08-9

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	7.3E-2	(mg/kg/day)^-1	LIVECHEM
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.9E+2	days	THOMAS
Photolysis:	2.1E+1	days	FATERATE
Biodeg:	2.1E+3	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	4.8E+1	days	THOMAS
Photolysis:	2.1E+1	days	FATERATE
Biodeg:	2.1E+3	days	FATERATE
Radio:		days	
Log Kow:	6.1E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	Yes		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	2.5E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	2.0E-9	Torr	CHEMFATE
Henry's Law:	8.3E-7	atm-m3/mol	CHEMFATE
Water Solub:	8.0E-4	mg/L	CHEMFATE
Distrib Coef:	1.9E+5	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:	2.0E+5		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	1.3E+4		ECOTOX
Salt BCF:	2.0E+5		ECOTOX
Log Kow:	6.1E+0		CHEMFATE
Water Solub:	8.0E-4		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	2.2E+2	C
Boiling Point:	4.8E+2	C
Formula:	C20 H12	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Benzo(k)fluoranthene **CAS Number:** 000207-08-9

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	100
Gas Mobility:	0.0002
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		100
Water Solub:		8.0E-4
Distrib:		1.9E+5
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-5
	Non Karst:	2.0E-9

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	100

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.2E-3	mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	8.8E+0	mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.2E-3	mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	4.3E-2	mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Beryllium
CAS Number: 007440-41-7

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	2.0E-3	mg/kg/day	IRIS
Inhal RfD:	5.7E+0	mg/kg/day	IRIS
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:	8.4E+0	(mg/kg/day)^-1	HEAST
Inhal Wt-of-Evid:	B1		
Oral ED10:	1.3E-2	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B2		
Inhal ED10:	1.3E-2	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B2		
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	-5.7E-1		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	9.0E+0		
Density:	1.9E+0	g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:	1.5E-2	atm-m3/mol	PHYSPROP
Water Solub:		mg/L	
Distrib Coef:	7.9E+2	ml/g	SSG_KD
Geo Mean Sol:	8.4E+4	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.9E+1		VER_BCF
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	1.9E+1		VER_BCF
Salt BCF:			
Log Kow:	-5.7E-1		PHYSPROP
Water Solub:			
Geo Mean Sol:	8.4E+4	mg/L	CALC

OTHER DATA

Melting Point:	1.3E+3	1287
Boiling Point:	2.5E+3	C
Formula:	Be	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Beryllium
CAS Number: 007440-41-7

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		7.9E+2
Geo Mean Sol:		8.4E+4
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:	1.0E-2	µg/m3
Cancer Risk:	1.0E-6	mg/m3
Non Cancer Risk:	2.1E+1	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	4.0E-3	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	7.3E-2	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	1.6E+2	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	4.0E-3	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	7.3E-2	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	2.7E+0	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Bis (2-ethylhexyl) phthalate **CAS Number:** 000117-81-7

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	2.0E-2	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:	1.4E-2	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:	5.2E+0	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B2		
Inhal ED10:	5.2E+0	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B2		
Oral LD50:	2.6E+4	mg/kg	ACGIH
Dermal LD50:	2.5E+4	mg/kg	ACGIH
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.6E+2	µg/L	ECOTOX
Salt Ecol LC50:	1.0E+3	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:	7.3E+5	days	CHEMFATE
Volatility:	6.9E+2	days	THOMAS
Photolysis:	2.0E+2	days	FATERATE
Biodeg:	8.0E-1	days	CHEMFATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:	7.3E+5	days	CHEMFATE
Volatility:	4.8E+2	days	THOMAS
Photolysis:	2.0E+2	days	FATERATE
Biodeg:	8.0E-1	days	CHEMFATE
Radio:		days	
Log Kow:	5.1E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	3.9E+2	
Density:	9.8E-1	g/mL @ 25.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	6.8E-8	Torr	CHEMFATE
Henry's Law:	1.0E-7	atm-m3/mol	CHEMFATE
Water Solub:	3.4E-1	mg/L	CHEMFATE
Distrib Coef:	2.3E+6	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	2.1E+4		ECOTOX
Salt BCF:	2.7E+2		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	1.1E+5		ECOTOX
Salt BCF:	6.5E+3		ECOTOX
Log Kow:	5.1E+0		CHEMFATE
Water Solub:	3.4E-1		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-5.5E+1	C
Boiling Point:	3.8E+2	C
Formula:	C24 H38 O4	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Bis (2-ethylhexyl) phthalate
CAS Number: 000117-81-7

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	100
Gas Mobility:	0.0002
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		100
Water Solub:		3.4E-1
Distrib:		2.3E+6
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-3
	Non Karst:	2.0E-7

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	100

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	5000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	6.0E-3	mg/L
Cancer Risk:	6.1E-3	mg/L
Non Cancer Risk:	7.3E-1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	4.6E+1	mg/kg
Non Cancer Risk:	1.6E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	6.0E-3	mg/L
Cancer Risk:	6.1E-3	mg/L
Non Cancer Risk:	7.3E-1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	2.3E-1	mg/kg
Non Cancer Risk:	2.7E+1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Boron
CAS Number: 007440-42-8

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	9.0E-2	mg/kg/day	IRIS
Inhal RfD:	5.7E-3	mg/kg/day	HEAST
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:			

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	1.1E+1		
Density:	2.3E+0	g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	3.0E+0	ml/g	BAES_KD
Geo Mean Sol:	3.6E+4	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:			
Water Solub:			
Geo Mean Sol:	3.6E+4	mg/L	CALC

OTHER DATA

Melting Point:	2.1E+3	C
Boiling Point:	4.0E+3	C
Formula:	B	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Boron
CAS Number: 007440-42-8

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	100
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		100
Water Solub:		
Distrib:		3.0E+0
Geo Mean Sol:		3.6E+4
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	100

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	100
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	0.5
Salt:	0.5

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:	2.1E-2	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	3.3E+0	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	7.0E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	3.3E+0	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	1.2E+2	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Bromodichloromethane
CAS Number: 000075-27-4

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	2.0E-2	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:	6.2E-2	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	4.3E+2	mg/kg	RTECS
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:	5.0E+4	days	CHEMFATE
Volatility:	1.1E+2	days	THOMAS
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:	5.0E+4	days	CHEMFATE
Volatility:	1.2E+0	days	THOMAS
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	2.1E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.6E+2	
Density:	2.0E+0	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	5.0E+1	Torr	CHEMFATE
Henry's Law:	1.6E-3	atm-m3/mol	CHEMFATE
Water Solub:	6.7E+3	mg/L	CHEMFATE
Distrib Coef:	1.1E-1	ml/g	SSG_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:	2.1E+0		CHEMFATE
Water Solub:	6.7E+3		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-5.7E+1	C
Boiling Point:	9.0E+1	C
Formula:	C H Br Cl2	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Bromodichloromethane
CAS Number: 000075-27-4

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	100
Gas Mobility:	1.0000
Gas Migration:	17

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		100
Water Solub:		6.7E+3
Distrib:		1.1E-1
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	100

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	100
Persistence	
River:	0.4000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	100
Persistence	
River:	0.4000
Lake:	1.0000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	0
Salt Tox:	0
Persistence	
River:	0.4000
Lake:	1.0000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.4E-3	mg/L
Non Cancer Risk:	7.3E-1	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	1.0E+1	mg/kg
Non Cancer Risk:	1.6E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	1.4E-3	mg/L
Non Cancer Risk:	7.3E-1	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	5.1E-2	mg/kg
Non Cancer Risk:	2.7E+1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Butylbenzyl phthalate **CAS Number:** 000085-68-7

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	2.0E-1	mg/kg/day	IRIS
Inhal RfD:		mg/kg/day	
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	2.3E+3	mg/kg	RTECS
Dermal LD50:	1.0E+4	mg/kg	RTECS
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	6.8E+2	µg/L	ECOTOX
Salt Ecol LC50:	4.6E+2	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:	1.9E+2	days	THOMAS
Photolysis:	1.0E+2	days	CHEMFATE
Biodeg:	4.0E+0	days	CHEMFATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:	3.6E+1	days	THOMAS
Photolysis:	1.0E+2	days	CHEMFATE
Biodeg:	4.0E+0	days	CHEMFATE
Radio:		days	
Log Kow:	4.9E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	No		
Organic:	Yes		
Gas:	Yes		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	3.1E+2		
Density:		g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	8.3E-6	Torr	CHEMFATE
Henry's Law:	1.3E-6	atm-m3/mol	CHEMFATE
Water Solub:	2.7E+0	mg/L	CHEMFATE
Distrib Coef:	8.7E+3	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	7.7E+2		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	7.7E+2		ECOTOX
Salt BCF:			
Log Kow:	4.9E+0		CHEMFATE
Water Solub:	2.7E+0		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:		C
Boiling Point:		C
Formula:	C19 H20 O4	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Butylbenzyl phthalate
CAS Number: 000085-68-7

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10
Gas Mobility:	0.0020
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10
Water Solub:		2.7E+0
Distrib:		8.7E+3
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-4
Non Liq.	Karst:	2.0E-1
	Non Karst:	2.0E-5

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	7.3E+0	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	1.6E+4	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	7.3E+0	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	2.7E+2	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Cadmium
CAS Number: 007440-43-9

TOXICITY

Parameter	Value		Unit	Source
Oral RfD:	5.0E-4		mg/kg/day	IRIS
Inhal RfD:	2.6E-4		mg/kg/day	STSC
Oral Slope:			(mg/kg/day)^-1	
Oral Wt-of-Evid:				
Inhal Slope:	6.3E+0		(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	B1			
Oral ED10:	1.7E-2		mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B1			
Inhal ED10:	1.7E-2		mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B1			
Oral LD50:	2.3E+3		mg/kg	RTECS
Dermal LD50:			mg/kg	
Gas Inhal LC50:			ppm	
Dust Inhal LC50:	2.1E+1		mg/L	RTECS
ACUTE				
Fresh CMC:	2.0E+0	D, E, K, bb	µg/L	WATCRIT
Salt CMC:	4.0E+1	D, bb	µg/L	WATCRIT
CHRONIC				
Fresh CCC:	2.5E-1	D, E, K, bb	µg/L	WATCRIT
Salt CCC:	8.8E+0	D, bb	µg/L	WATCRIT
Fresh Ecol LC50:	4.0E-1		µg/L	ECOTOX
Salt Ecol LC50:	2.0E-1		µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	-7.0E-2		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	No		
Molecular Weight:	1.1E+2		
Density:	8.7E+0	g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:	3.1E-2	atm-m3/mol	PHYSPROP
Water Solub:		mg/L	
Distrib Coef:	7.5E+1	ml/g	SSG_KD
Geo Mean Sol:	1.7E+3	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.0E+3		ECOTOX
Salt BCF:	5.0E+4		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	2.0E+5		ECOTOX
Salt BCF:	5.0E+4		ECOTOX
Log Kow:	-7.0E-2		PHYSPROP
Water Solub:			
Geo Mean Sol:	1.7E+3	mg/L	CALC

OTHER DATA

Melting Point:	3.2E+2	C
Boiling Point:	7.7E+2	C
Formula:	Cd	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Cadmium
CAS Number: 007440-43-9

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10000
Water Solub:		
Distrib:		7.5E+1
Geo Mean Sol:		1.7E+3
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	10000
Salt Tox:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	1.4E-6	mg/m3
Non Cancer Risk:	9.4E-4	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	5.0E-3	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.8E-2	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	3.9E+1	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	5.0E-3	mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	1.8E-2	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	6.8E-1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:	2.0E+0 [D, E, K, bb]	µg/L
Salt CMC:	4.0E+1 [D, bb]	µg/L
CHRONIC		
Fresh CCC:	2.5E-1 [D, E, K, bb]	µg/L
Salt CCC:	8.8E+0 [D, bb]	µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Cadmium 109 (radionuclide) **CAS Number:** 014109-32-1

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	Food: 6.70E-12	(pCi)^-1	HEAST
	Soil: 1.14E-11	(pCi)^-1	HEAST
	Water: 5.00E-12	(pCi)^-1	HEAST
Oral Wt-of-Evid:	A		
Inhal Slope:	2.2E-11	(pCi)^-1	HEAST
Inhal Wt-of-Evid:	A		
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	Yes	
Organic:	No	
Gas:	No	
Particulate:	Yes	
Radionuclide:	Yes	
Rad. Element:	No	
Molecular Weight:	1.1E+2	
Density:	8.7E+0	g/mL @ 25.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	7.5E+1	ml/g	SSG_KD
Geo Mean Sol:	1.7E+3	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	1.0E+3		ECOTOX
Salt BCF:	5.0E+4		ECOTOX
ENVIRONMENTAL			
Fresh BCF:	2.0E+5		ECOTOX
Salt BCF:	5.0E+4		ECOTOX
Log Kow:	-7.0E-2		PHYSPROP
Water Solub:			
Geo Mean Sol:	1.7E+3	mg/L	CALC

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:	4.7E+2	days	SSG-Rad
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:	4.7E+2	days	SSG-Rad
Log Kow:	-7.0E-2		PHYSPROP

OTHER DATA

Melting Point:	3.2E+2	C
Boiling Point:	7.7E+2	C
Formula:	Cd-109	

CLASS INFORMATION

Class	Parent Substance
GW Mob:	007440-43-9
Other:	007440-43-9

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Cadmium 109 (radionuclide) **CAS Number:** 014109-32-1

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	1000
Gas Mobility:	
Gas Migration:	

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		1000
Water Solub:		
Distrib:		7.5E+1
Geo Mean Sol:		1.7E+3
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E-2

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	1000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	1000
Persistence	
River:	1.0000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	5000.0
Salt:	50000.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	1.0000
Lake:	1.0000
Bioaccumulation	
Fresh:	50000.0
Salt:	50000.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:	6.0E+2	pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:	2.2E-1	pCi/m3
DW:	9.5E+0	pCi/L
FC:	2.6E+2	pCi/kg
Soil Ing:	7.0E+4	pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Carbazole
CAS Number: 000086-74-8

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:	2.0E-2	(mg/kg/day)^-1	HEAST
Oral Wt-of-Evid:	B2		
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	4.0E+2	mg/kg	RTECS
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	9.3E+2	µg/L	ECOTOX
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	3.7E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	Yes	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.7E+2	
Density:	1.1E+0	g/mL @ 18.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	7.0E-4	Torr	CHEMFATE
Henry's Law:	8.7E-8	atm-m3/mol	PHYSPROP
Water Solub:	1.2E+0	mg/L	CHEMFATE
Distrib Coef:	5.2E+2	ml/g	DITOR_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	1.2E+2		ECOTOX
Salt BCF:			
Log Kow:	3.7E+0		CHEMFATE
Water Solub:	1.2E+0		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	2.5E+2	C
Boiling Point:	3.5E+2	C
Formula:	C12 H9 N	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Carbazole
CAS Number: 000086-74-8

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10
Gas Mobility:	0.0200
Gas Migration:	6

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10
Water Solub:		1.2E+0
Distrib:		5.2E+2
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E-2
Non Liq.	Karst:	2.0E-1
	Non Karst:	2.0E-3

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.0700

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.0700
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	1000
Salt Tox:	1000
Persistence	
River:	0.4000
Lake:	0.0700
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:		mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	4.3E-3	mg/L
Non Cancer Risk:		mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	3.2E+1	mg/kg
Non Cancer Risk:		mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:	4.3E-3	mg/L
Non Cancer Risk:		mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	1.6E-1	mg/kg
Non Cancer Risk:		mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Carbon disulfide
CAS Number: 000075-15-0

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	1.0E-1	mg/kg/day	IRIS
Inhal RfD:	2.0E-1	mg/kg/day	IRIS
Oral Slope:		(mg/kg/day)^-1	
Oral Wt-of-Evid:			
Inhal Slope:		(mg/kg/day)^-1	
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:	1.2E+3	mg/kg	RTECS
Dermal LD50:		mg/kg	
Gas Inhal LC50:	2.0E+3	ppm	RTECS
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	1.9E+3	µg/L	ECOTOX
Salt Ecol LC50:	4.5E+4	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:	4.0E+2	days	CHEMFATE
Volatility:	7.7E+1	days	THOMAS
Photolysis:	1.1E+1	days	CHEMFATE
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:	4.0E+2	days	CHEMFATE
Volatility:	8.3E-1	days	THOMAS
Photolysis:	1.1E+1	days	CHEMFATE
Biodeg:		days	
Radio:		days	
Log Kow:	2.2E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	No	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	7.6E+1	
Density:	1.3E+0	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	3.6E+2	Torr	CHEMFATE
Henry's Law:	3.0E-2	atm-m3/mol	CHEMFATE
Water Solub:	1.2E+3	mg/L	CHEMFATE
Distrib Coef:	9.1E-2	ml/g	SSG_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:	2.2E+0		CHEMFATE
Water Solub:	1.2E+3		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-1.2E+2	C
Boiling Point:	4.6E+1	C
Formula:	C S2	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Carbon disulfide
CAS Number: 000075-15-0

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	10
Gas Mobility:	1.0000
Gas Migration:	17

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		10
Water Solub:		1.2E+3
Distrib:		9.1E-2
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	10

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.4000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	10
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	100
Salt Tox:	10
Persistence	
River:	0.4000
Lake:	0.4000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:		mg/m3
Non Cancer Risk:	7.3E-1	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	3.7E+0	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:		mg/kg
Non Cancer Risk:	7.8E+3	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:		mg/L
Cancer Risk:		mg/L
Non Cancer Risk:	3.7E+0	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:		mg/kg
Non Cancer Risk:	1.4E+2	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Carbon tetrachloride
CAS Number: 000056-23-5

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:	7.0E-4	mg/kg/day	IRIS
Inhal RfD:	5.7E-3	mg/kg/day	STSC
Oral Slope:	1.3E-1	(mg/kg/day)^-1	IRIS
Oral Wt-of-Evid:	B2		
Inhal Slope:	5.2E-2	(mg/kg/day)^-1	IRIS
Inhal Wt-of-Evid:	B2		
Oral ED10:	1.7E-2	mg/kg/day	EPA_ED10
Oral ED10 Wgt:	B2		
Inhal ED10:	1.7E-2	mg/kg/day	EPA_ED10
Inhal ED10 Wgt:	B2		
Oral LD50:	2.3E+3	mg/kg	ACGIH
Dermal LD50:	1.5E+4	mg/kg	ACGIH
Gas Inhal LC50:	7.3E+3	ppm	ACGIH
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:	2.0E+3	µg/L	ECOTOX
Salt Ecol LC50:	5.0E+4	µg/L	ECOTOX

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:	2.6E+6	days	CHEMFATE
Volatility:	1.1E+2	days	THOMAS
Photolysis:	1.1E+3	days	CHEMFATE
Biodeg:	3.6E+2	days	FATERATE
Radio:		days	
RIVER - Halflives			
Hydrolysis:	2.6E+6	days	CHEMFATE
Volatility:	1.2E+0	days	THOMAS
Photolysis:	1.1E+3	days	CHEMFATE
Biodeg:	3.6E+2	days	FATERATE
Radio:		days	
Log Kow:	2.8E+0		CHEMFATE

PHYSICAL CHARACTERISTICS

Parameter	Value	
Metal Contain:	No	
Organic:	Yes	
Gas:	Yes	
Particulate:	No	
Radionuclide:	No	
Rad. Element:	No	
Molecular Weight:	1.5E+2	
Density:	1.6E+0	g/mL @ 20.00 C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:	1.2E+2	Torr	CHEMFATE
Henry's Law:	3.0E-2	atm-m3/mol	CHEMFATE
Water Solub:	7.9E+2	mg/L	CHEMFATE
Distrib Coef:	3.5E-1	ml/g	SSG_KD
Geo Mean Sol:		mg/L	

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:	3.0E+1		ECOTOX
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:	3.0E+2		ECOTOX
Salt BCF:			
Log Kow:	2.8E+0		CHEMFATE
Water Solub:	7.9E+2		CHEMFATE
Geo Mean Sol:		mg/L	

OTHER DATA

Melting Point:	-2.3E+1	C
Boiling Point:	7.7E+1	C
Formula:	C Cl4	

CLASS INFORMATION

Class	Parent Substance

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Carbon tetrachloride
CAS Number: 000056-23-5

ASSIGNED FACTOR VALUES

AIR PATHWAY

Parameter	Value
Toxicity:	1000
Gas Mobility:	1.0000
Gas Migration:	17

GROUND WATER PATHWAY

Parameter		Value
Toxicity:		1000
Water Solub:		7.9E+2
Distrib:		3.5E-1
Geo Mean Sol:		
Mobility:		
Liquid	Karst:	1.0E+0
	Non Karst:	1.0E+0
Non Liq.	Karst:	1.0E+0
	Non Karst:	1.0E+0

SOIL EXPOSURE PATHWAY

Parameter	Value
Toxicity:	1000

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value
Toxicity:	1000
Persistence	
River:	0.4000
Lake:	1.0000

HUMAN FOOD CHAIN

Parameter	Value
Toxicity:	1000
Persistence	
River:	0.4000
Lake:	1.0000
Bioaccumulation	
Fresh:	50.0
Salt:	50.0

ENVIRONMENTAL

Parameter	Value
Fresh Tox:	100
Salt Tox:	10
Persistence	
River:	0.4000
Lake:	1.0000
Bioaccumulation	
Fresh:	500.0
Salt:	500.0

BENCHMARKS

AIR PATHWAY

Parameter	Value	Unit
NAAQS/NESHAPS:		µg/m3
Cancer Risk:	1.6E-4	mg/m3
Non Cancer Risk:	2.1E-2	mg/m3

GROUND WATER PATHWAY

Parameter	Value	Unit
MCL/MCLG:	5.0E-3	mg/L
Cancer Risk:	6.6E-4	mg/L
Non Cancer Risk:	2.6E-2	mg/L

SOIL EXPOSURE PATHWAY

Parameter	Value	Unit
Cancer Risk:	4.9E+0	mg/kg
Non Cancer Risk:	5.5E+1	mg/kg

RADIONUCLIDE

Parameter	Value	Unit
MCL:		pCi/L
UMTRCA:		pCi/kg
CANCER RISK		
Air:		pCi/m3
DW:		pCi/L
FC:		pCi/kg
Soil Ing:		pCi/kg
Soil Gam:		pCi/kg

SURFACE WATER PATHWAY

DRINKING WATER

Parameter	Value	Unit
MCL/MCLG:	5.0E-3	mg/L
Cancer Risk:	6.6E-4	mg/L
Non Cancer Risk:	2.6E-2	mg/L

HUMAN FOOD CHAIN

Parameter	Value	Unit
FDAAL:		ppm
Cancer Risk:	2.4E-2	mg/kg
Non Cancer Risk:	9.5E-1	mg/kg

ENVIRONMENTAL

Parameter	Value	Unit
ACUTE		
Fresh CMC:		µg/L
Salt CMC:		µg/L
CHRONIC		
Fresh CCC:		µg/L
Salt CCC:		µg/L

SUPERFUND CHEMICAL DATA MATRIX

Date: 1/28/2004
Chemical: Cesium
CAS Number: 007440-46-2

TOXICITY

Parameter	Value	Unit	Source
Oral RfD:		mg/kg/day	
Inhal RfD:		mg/kg/day	
Oral Slope:			
Oral Wt-of-Evid:			
Inhal Slope:			
Inhal Wt-of-Evid:			
Oral ED10:		mg/kg/day	
Oral ED10 Wgt:			
Inhal ED10:		mg/kg/day	
Inhal ED10 Wgt:			
Oral LD50:		mg/kg	
Dermal LD50:		mg/kg	
Gas Inhal LC50:		ppm	
Dust Inhal LC50:		mg/L	
ACUTE			
Fresh CMC:		µg/L	
Salt CMC:		µg/L	
CHRONIC			
Fresh CCC:		µg/L	
Salt CCC:		µg/L	
Fresh Ecol LC50:		µg/L	
Salt Ecol LC50:		µg/L	

PERSISTENCE

Parameter	Value	Unit	Source
LAKE - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
RIVER - Halflives			
Hydrolysis:		days	
Volatility:		days	
Photolysis:		days	
Biodeg:		days	
Radio:		days	
Log Kow:	2.3E-1		PHYSPROP

PHYSICAL CHARACTERISTICS

Parameter	Value		
Metal Contain:	Yes		
Organic:	No		
Gas:	No		
Particulate:	Yes		
Radionuclide:	No		
Rad. Element:	Yes		
Molecular Weight:	1.3E+2		
Density:	1.9E+0	g/mL @	C

MOBILITY

Parameter	Value	Unit	Source
Vapor Press:		Torr	
Henry's Law:		atm-m3/mol	
Water Solub:		mg/L	
Distrib Coef:	1.0E+3	ml/g	BAES_KD
Geo Mean Sol:	3.4E+5	mg/L	CALC

BIOACCUMULATION

Parameter	Value	Unit	Source
FOOD CHAIN			
Fresh BCF:			
Salt BCF:			
ENVIRONMENTAL			
Fresh BCF:			
Salt BCF:			
Log Kow:	2.3E-1		PHYSPROP
Water Solub:			
Geo Mean Sol:	3.4E+5	mg/L	CALC

OTHER DATA

Melting Point:	2.9E+1	C
Boiling Point:	6.7E+2	C
Formula:	Cs	

CLASS INFORMATION

Class	Parent Substance

HRS factor values are assigned to radioactive isotopes but not to radioactive elements. Data for a radioactive element is used to derive factor values for that element's isotopes.