Final Risk Evaluation for Cyclic Aliphatic Bromide Cluster (HBCD)

Systematic Review Supplemental File:

Data Extraction of Environmental Hazard Studies

CASRN:25637-99-4 CASRN:3194-55-6

CASRN:3194-57-8

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Table 1. On-topic aquatic toxicity studies that were evaluated for HBCD

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
Aquatic Veget	tation		l .				•			
25637-99-4	Green algae (Pseudokirc hneriella subcapitata)	Fresh	24-hour	$EC_{10} = >0.0037$ mg AI/L (0.0037 is the mean of the Day 0 and Day 4 6.8 mg/L measurements)	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	1928298; 6836803
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	24-hour	$EC_{50} = >0.0037 \text{ mg}$ AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	24-hour	EC ₉₀ = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	48-hour	EC ₁₀ = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	48-hour	EC ₅₀ = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	

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25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	48-hour	EC ₉₀ = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	(1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	72-hour	$EC_{10} = >0.0037 \text{ mg}$ AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	72-hour	EC ₅₀ = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	72-hour	$EC_{90} = >0.0037 \text{ mg}$ AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	96-hour	$EC_{10} = >0.0037 \text{ mg}$ AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	96-hour	EC ₅₀ = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Green algae (Pseudokirchne riella subcapitata)		96-hour	$EC_{90} = >0.0037 \text{ mg}$ AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Abundance (cell density); Population growth rate (area under growth curve)	(1997b)	High	
25637-99-4	Green algae (Pseudokirchne riella subcapitata)	Fresh	96-hour	NOEC = >0.0037 mg AI/L	0.0015, 0.0022, 0.0032, 0.0046, 0.0068 mg/L (nominal); 0.0013, 0.0022, 3.38, 0.0042, 0.0064 mg/L (measured, Day 0)	Static, Measured. Solvent: Dimethylformamide	Population growth rate (area under growth curve)	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	$EC_{50} = 0.0101 \text{ mg}$ AI/L; Seawater, Test	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	1927837
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.01 mg AI/L; Seawater, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.0122 mg AI/L; Rila Marine Mix, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.0118 mg AI/L; Rila Marine Mix, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.01 mg AI/L; Instant Ocean sea salts, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.01 mg AI/L; Instant Ocean sea salts, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.0113 mg AI/L; Utikem seawater compound, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.0113 mg AI/L; Utikem seawater compound, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.0095 mg AI/L; HW Marine Mix, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ = 0.009 mg AI/L; HW Marine Mix, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.07 mg AI/L; Seawater, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.08 mg AI/L; Seawater, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.38 mg AI/L; Rila Marine Mix, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.36 mg AI/L; Rila Marine Mix, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.15 mg AI/L; Instant Ocean sea salts, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.14 mg AI/L; Instant Ocean sea salts, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.1 mg AI/L; 40 fathoms marine mix, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.1 mg AI/L; 40 fathoms marine mix, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.09 mg AI/L; Utikem seawater compound, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.09 mg AI/L; Utikem seawater compound, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.05 mg AI/L; HW Marine Mix, Test 1	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	Walsh et al. (1987)	High	
25637-99-4	Diatom (Thalassiosira pseudonana)	Salt	72-hour	EC ₅₀ = 0.04 mg AI/L; HW Marine Mix, Test 2	Not Reported	Static, Measured, Solvent: Acetone	Population change (change in N/change in time)	<u>Walsh et al.</u> (1987)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₅₀ >0.041 mg/L	$\alpha = 0.0014 \text{ mg/L}$ $\beta = 0.0075 \text{ mg/L}$ $\gamma = 0.026 \text{ mg/L}$	Static, Measured	Cell density, Biomass, Growth rate. Inhibition	Desjardins et al. (2005)	High	3809177
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC ₁₀ (NOEC) 0.041 mg/L	$\alpha = 0.0014 \text{ mg/L}$ $\beta = 0.0075 \text{ mg/L}$ $\gamma = 0.026 \text{ mg/L}$	Static, Measured	Cell density, Biomass, Growth rate. Inhibition		High	
25637-99-4	Diatom (Skeletonema costatum)	Salt		EC ₅₀ >0.010 mg/L	$\begin{array}{c} \gamma = 0.0, 0.0006,\\ 0.0016, 0.004 \text{ and}\\ 0.01 \text{ mg/L} \end{array}$	Static, nominal DMF	Growth; Biomass	(2005)	High	3809170
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	EC50>0.010 mg/L	γ = 0.0, 0.0006, 0.0016, 0.004 and 0.01 mg/L	Static, nominal DMF	Growth; Biomass	Desjardins et al. (2005)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt		$EC_{50} = 0.027 \text{ mg/L}$	$\begin{array}{c} \alpha = 0.00354 \ mg/L \\ \beta = 0.0152 \ mg/L \\ \gamma = 0.0358 \ mg/L \end{array}$	Static, Measured	Inhibition	Desjardins et al. (2005)	High	
25637-99-4	Diatom (Skeletonema costatum)	Salt	72-hour	$EC_{50} = 0.052 \text{ mg/L}$	$\begin{array}{c} \alpha = 0.00354 \ mg/L \\ \beta = 0.0152 \ mg/L \\ \gamma = 0.0358 \ mg/L \end{array}$	Static, Measured	Growth	Desjardins et al. (2005)	High	
134237-50-6	Blue-green Algae (Spirulina subsalsa)	Fresh	168-hour	BCF = 350	0.002 mg/L	Static, Measured	Residue; Bioconcentration	Zhang et al. (2014c)	High	2343690
134237-50-6	Green Algae (Scenedesmus acutus var. acutus)	Fresh	168-hour	BCF = 407	0.002 mg/L	Static, Measured	Residue; Bioconcentration	Zhang et al. (2014c)	High	
134237-51-7	Blue-green Algae (Spirulina subsalsa)	Fresh	168-hour	BCF = 270	0.002 mg/L	Static, Measured	Residue; Bioconcentration	Zhang et al. (2014c)	High	
134237-51-7	Green Algae (Scenedesmus acutus var. acutus)	Fresh	168-hour	BCF = 469	0.002 mg/L	Static, Measured	Residue; Bioconcentration	Zhang et al. (2014c)	High	
134237-52-8	Green Algae (Scenedesmus acutus var. acutus)	Fresh	168-hour	BCF = 390	0.002 mg/L	Static, Measured	Residue; Bioconcentration	Zhang et al. (2014c)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-52-8	Blue-green Algae (Spirulina subsalsa)	Fresh	168-hour	BCF = 174	0.002 mg/L	Static, Measured	Residue; Bioconcentration	Zhang et al. (2014c)	High	
Aquatic Invert	ebrates				•				•	
3194-55-6	Water flea (Daphnia magna)	Fresh	3-hour	EC ₀ = 1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	1928267
3194-55-6	Water flea (Daphnia magna)	Fresh	3-hour	EC ₅₀ = >1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	3-hour	$EC_{100} = >1000 \text{ mg}$ AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	6-hour	EC ₀ = 1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	6-hour	$EC_{50} = >1000$	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	6-hour	EC ₁₀₀ = >1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	24-hour	EC ₀ = 1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	24-hour	EC ₅₀ = >1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	24-hour	EC ₁₀₀ = >1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	48-hour	$EC_0 = 1 \text{ mg AI/L}$	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	48-hour	$EC_{50} = 146.34 \text{ mg}$ AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	
3194-55-6	Water flea (Daphnia magna)	Fresh	48-hour	EC ₁₀₀ = >1000 mg AI/L	0, 0.01, 0.1, 1, 10, 100, 1000 mg/L	Static, Nominal	Behavioral: Swimming	BASF (1990)	High	

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25637-99-4	Water flea (Daphnia magna)	Fresh	48-hour	$EC_{50} = >0.0032 \text{ mg}$ AI/L	0, 0.0018, 0.0021, 0.0023, 0.0024, 0.0032 mg/L	Flow-through, Measured, Solvent: DMF	Mortality	Wildlife Intl Ltd (1997a)	High	1928297; 3586421
25637-99-4	Water flea (Daphnia magna)	Fresh	48-hour	NOEC = 0.0032 mg AI/L	0.0023, 0.0024, 0.0032 mg/L	Flow-through, Measured, Solvent: DMF	Mortality, Immobility	Wildlife Intl Ltd (1997a)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	24-hour	$EC_{50} = >0.011 \text{ mg}$ AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality; Progeny counts/ numbers	Wildlife Intl Ltd (1998)	High	1928243; 3809169; 1928293
25637-99-4	Water flea (Daphnia magna)	Fresh	48-hour	$EC_{50} = >0.011 \text{ mg}$ AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality; Progeny counts/ numbers	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	96-hour	EC ₅₀ = >0.011 mg AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality; Progeny counts/ numbers	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	7-day	$EC_{50} = >0.011 \text{ mg}$ AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality; Progeny counts/ numbers	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	14-day	$EC_{50} = >0.011 \text{ mg}$ AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality; Progeny counts/ numbers	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	21-day	$EC_{50} = >0.011 \text{ mg}$ AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality; Progeny counts/ numbers	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	21-day	NOEC = 0.011 mg AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Mortality	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	21-day	NOEC = 0.0056 mg AI/L; LOEC = 0.011 mg AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Progeny counts/numbers; Growth: Weight	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	21-day	LOEC = 0.0056 mg AI/L	0, 0.00087, 0.0016, 0.0031, 0.0056, 0.011 mg/L	Flow-through, Measured, Solvent: DMF	Growth: Length	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	21-day	NOEC = 0.0031 mg AI/L		Flow-through, Measured, Solvent: DMF	Growth: Length	Wildlife Intl Ltd (1998)	High	
25637-99-4	Water flea (Daphnia magna)	Fresh	21-day	MATC = 0.0042 mg AI/L		Flow-through, Measured, Solvent: DMF	Growth: Length	Wildlife Intl Ltd (1998)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	1-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: Dimethyl sulfoxide (DMSO)	7-Ethoxyresorufin O-deethylase; Glutathione (reduced glutathione); DNA damage	Zhang et al. (2014a)	High	2528343
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	3-day	LOAEL = 0.000086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	6-day	mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione); Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	LOAEL = 0.000086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione)	Zhang et al. (2014a)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	15-day	mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione)	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	1-day	NOAEL = 0.0086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	3-day	mg AI/L; LOAEL = 0.00086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione); Lipid peroxidation; DNA damage	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	6-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	DNA damage	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	mg AI/L; LOAEL = 0.00086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	DNA damage; Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	15-day	NOAEL = 0.00086 mg AI/L; LOAEL = 0.0086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	DNA damage	Zhang et al. (2014a)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	1-day	NOAEL = 0.00086 mg AI/L; LOAEL = 0.0086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	15-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Gill tissue	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	1-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione (reduced glutathione); DNA damage	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	3-day	LOAEL = 0.000086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	6-day	LOAEL = 0.000086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione); Lipid peroxidation	Zhang et al. (2014a)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	LOAEL = 0.000086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione)	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	15-day	LOAEL = 0.000086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione)	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	1-day	NOAEL = 0.0086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	3-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Digestive gland	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Glutathione S- transferase; Superoxide dismutase (SOD) enzyme activity; Glutathione (reduced glutathione); DNA damage; Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	6-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Digestive gland	0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	DNA damage	Zhang et al. (2014a)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Digestive gland	0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	DNA damage; Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	15-day	NOAEL = 0.00086 mg AI/L; LOAEL = 0.0086 mg AI/L; Digestive gland	0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	DNA damage	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt		NOAEL = 0.00086 mg AI/L; LOAEL = 0.0086 mg AI/L; Digestive gland	0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Lipid peroxidation	Zhang et al. (2014a)	High	
3194-55-6	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	15-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L; Digestive gland	0.000086, 0.00086, 0.0086 mg/L	Renewal, Not reported, Solvent: DMSO	Lipid peroxidation	Zhang et al. (2014a)	High	
25637-99-4	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	3-day	LOAEL = 0.000086 mg AI/L	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Nominal, Solvent: DMSO	Ferritin mRNA; Catalase mRNA; Dihydrodiol dehydrogenase mRNA; Cytochrome c oxidase subunit 1 mRNA; NADH: ubiquinone reductase (H(+)- translocating) mRNA	Zhang et al. (2013)	High	1928024

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	LOAEL = 0.000086 mg AI/L	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Nominal, Solvent: DMSO	Ferritin mRNA; Catalase mRNA; Dihydrodiol dehydrogenase mRNA; C-type Lectin like mRNA; Elongation factor- 1 alpha mRNA; Hemocyanin subunit 2 mRNA	Zhang et al. (2013)	High	
25637-99-4	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	NOAEL = 0.0086 mg AI/L	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Nominal, Solvent: DMSO	Cytochrome c oxidase subunit 1 mRNA	Zhang et al. (2013)	High	
25637-99-4	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	NOAEL = 0.000086 mg AI/L; LOAEL = 0.00086 mg AI/L	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Nominal, Solvent: DMSO	NADH: ubiquinone reductase (H(+)- translocating) mRNA	Zhang et al. (2013)	High	
25637-99-4	Japanese Littleneck Clam (Venerupis philippinarum)	Salt	10-day	NOAEL = 0.00086 mg AI/L; LOAEL = 0.0086 mg AI/L	0, 0.000086, 0.00086, 0.0086 mg/L	Renewal, Nominal, Solvent: DMSO	Purine nucleoside phosphorylase mRNA	Zhang et al. (2013)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	72 hours post fertilization	NOAEL = 0.06416989 mg AI/L; Exp. A	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	1274149
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	72 hours post	NOAEL = 0.032 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. B	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	2-4 days post fertilization	NOAEL = 0.032 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. A	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	2-4 days post fertilization	NOAEL = 0.032 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. B	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	2-4 days post fertilization		0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	7-9 days post fertilization	NOAEL = 0.0320 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. B	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	7-9 days post fertilization		0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	post	NOAEL = 0.0325 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. A	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	14-16 days post fertilization	EC50 = 0.056 mg AI/L; Exp.	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	post	NOAEL = 0.0325 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. B	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	14-16 days post fertilization	EC ₅₀ = 0.035mg AI/L; Exp. B	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	16 days post fertilization	NOAEL = 0.032 mg AI/L; LOAEL = 0.064 mg AI/L; Exp. A	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Development	Anselmo et al. (2011)	High	
25637-99-4	Sea urchin (Psammechinus miliaris)	Salt	16 days post fertilization	NOAEL = 0.0058 mg AI/L; LOAEL = 0.016 mg AI/L Exp. B	0, 0.006, 0.016, 0.032, 0.064 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Development	Anselmo et al. (2011)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	96-hour	NOEC = 0.8 mg AI/L; LOEC = >0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Mortality	Shi et al. (2017)	High	3546057
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	96-hour	Kinetic BCF = 87,300	0, 0.002 mg/L	Renewal, Nominal	Residue; bioconcentration	Shi et al. (2017)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint (s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	96-hour	Steady-State BCF = 63,400	0, 0.002 mg/L	Renewal, Nominal	Residue; bioconcentration	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	96-hour	Lipid-Normalized Kinetic BCF = 78,400	0, 0.002 mg/L	Renewal, Nominal	Residue; bioconcentration	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	3-day	NOAEL = 0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Glutathione S- transferase mRNA; p53 mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	7-day	NOAEL = 0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Glutathione S- transferase mRNA; Catalase; p53 mRNA; Superoxide dismutase mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	14-day	NOAEL = 0.3 mg AI/L; LOAEL = 0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Glutathione S- transferase mRNA; 8- oxoguanine DNA glycosylase mRNA; p53 mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	3-day	NOAEL = 0.3 mg AI/L; LOAEL = 0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Catalase; 8- oxoguanine DNA glycosylase mRNA; Superoxide dismutase mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	14-day	LOAEL = 0.3 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Catalase; Caspase-3 mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	7-day	NOAEL = 0.3 mg AI/L; LOAEL = 0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	8-oxoguanine DNA glycosylase mRNA	Shi et al. (2017)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	3-day	LOAEL = 0.3 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Caspase-3 mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	7-day	LOAEL = 0.3 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Caspase-3 mRNA	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	10-day	NOAEL = 0.8 mg AI/L; F0 generation	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Reproductive: Fecundity; Progeny counts/numbers; Sex ratio	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	10-day	NOAEL = 0.8 mg AI/L; F1 generation	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Reproductive: Fecundity; Progeny counts/numbers; Sex ratio	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	20-day	NOEC = 0.08 mg AI/L; LOEC = 0.3 mg AI/L; F0 generation; maturation period	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Growth, Developmental stage	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	20-day	NOEC = 0.008 mg AI/L; LOEC = 0.03 mg AI/L; F1 generation; maturation period	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Growth, Developmental stage	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	20-day	NOEC = 0.008 mg AI/L; LOEC = 0.03 mg AI/L; F0 generation; nauplius phase	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Growth, Developmental stage	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	20-day	LOEC = 0.008 mg AI/L; F1 generation; nauplius phase	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Growth, Developmental stage	Shi et al. (2017)	High	
25637-99-4	Harpacticoid Copepod (Tigriopus japonicus)	Salt	40-day	NOEC = 0.8 mg AI/L	0, 0.008, 0.03, 0.08, 0.3, 0.8 mg/L	Renewal, Nominal, Solvent: DMSO	Mortality	Shi et al. (2017)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Balic Macoma Or Clam (Macoma balthica)	Salt	50-day	LOAEL = 0.1 mg/L	0, 0.1, 0.25 mg/L	Multiple routes, Nominal	Nuclear abnormality: micronuclei; frequency of dead cells; Mean number of nucleoli; binucleated cells, formation of nucleoplasmic bridges, nuclear buds, occurrence of pleomorphic and hypertrophic cells	Smolarz and Berger (2009)	High	1927697
25637-99-4	Amphipod (Hyalella azteca)	Fresh	28-day	NOEC > 1000 mg/kg dwt sediment	31,63, 125, 250, 500 and 1,000 mg/kg dwt sediment (Nominal concentrations)	Flow-through, Measured, Solvent: DMF range-finding study conducted in the presence of 2 % TOC. Further study details were not provided.	Reduced survivability	ACC (2003a)	High	4269889
25637-99-4	Amphipod (Hyalella azteca)	Fresh	28-day		and 1,000 mg/kg dwt sediment (Nominal concentrations)	Flow-through, Measured, Solvent: DMF range- finding study conducted in the presence of 2 % TOC. Further study details were not provided.	Reduced survivability	ACC (2003a)	High	
25637-99-4	Amphipod (Hyalella azteca)	Fresh			and 1,000 mg/kg dwt sediment (Nominal concentrations)	Flow-through, Measured, Solvent: DMF range- finding study conducted in the presence of 5% TOC. Further study details were not provided.	Reduced survivability	ACC (2003b)	High	3809137; 4269912
25637-99-4	Amphipod (Hyalella azteca)	Fresh	28-day	NOEC = 1000 mg/kg dwt sediment	31,63, 125, 250, 500 and 1,000 mg/kg dwt sediment (Nominal concentrations)	Flow-through, Measured, Solvent: DMF range- finding study conducted in the presence of 5% TOC. Further study details were not provided.	Reduced survivability	ACC (2003b)	High	

Worm (Lumbriculus variegatus) Worm (Lumbriculus variegatus) Worm (Lumbriculus variegatus) Worm (Lumbriculus variegatus) Fresh (28-day MoEC = 3.1 mg/kg dry weight sediment to 500 mg/kg dry weight sediment. measured concentrations were ND, 0.2, 3.1, 28.7, and 303.2 mg/kg dry weight. Worm (Lumbriculus variegatus) Worm (Lumbriculus variegatus) Worm (Lumbriculus variegatus) Fresh (28-day dry weight sediment to 500 mg/kg dry weight sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms per treatment; and 313.5 mg/kg sediment dw; 40 worms dechlorinated tap water measured concentrations-and 313.5 mg/kg sediment dw; 40 worms dechlorinated tap water measured concentrations-and 313.5 mg/kg sediment dw; 40 worms dechlorinated tap water measured concentrations-and 313.5 mg/kg sediment dw; 40 worms dechlorinated tap water measured concentrations-and 313.5 mg/kg sediment dw; 40 worms dechlorinated tap	3809143
Sediment. measured concentrations were ND, 0.2, 3.1, 28.7, and 303.2 mg/kg dry weight. Sediment dw; 40 worms per treatment; artificial sediment: 1.8% organic carbon, grain size 100–2000 μm; Sediment dw; 40 worms per treatment; artificial sediment: 1.8% organic carbon, grain size 100–2000 μm; Sediment dw; 40 worms per treatment; artificial sediment: 1.8% organic carbon, grain size 100–2000 μm; Sediment dw; 40 worms per treatment; artificial sediment to size 100–2000 μm; Sediment dw; 40 worms per treatment; artificial sediment to size 100–2000 μm; Sediment dw; 40 worms per treatment;	
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and 303.2 mg/kg dry weight. Worm (Lumbriculus variegatus) Sediment dw; 40 worms per treatment; artificial sediment: 1.8% organic carbon, grain size 100–2000 µm; 28-day static test using dechlorinated tap water measured concentrations-concentrations were ND, 0.2, 3.1, 28.7, and 303.2 mg/kg dry weight. Worm (Loec = 28.7 mg/kg organic carbon, grain size 100–2000 µm; Total number of worms (2001) Worms (2001)	_
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and 303.2 mg/kg dry weight. sediment dw; 40 worms per treatment;	
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size 100–2000 μm;	-
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concentrations were 0, nd3, 0.25, 3.25, 29.25	
ND, 0.2, 3.1, 28.7, and 311.35 mg/kg	
and 303.2 mg/kg dry sediment dw;	
weight. 40 worms per treatment; artificial sediment: 1.8%	
organic carbon, grain	
Worm Fresh 28-day NOEC = 3.1 mg/kg 0.05, 0.5, 5, 50, and 28-day static test using Large vs small Oetken et al. High	-
variegatus) sediment. measured measured concentrations- concentrations were 0, nd3, 0.25, 3.25, 29.25	
ND, 0.2, 3.1, 28.7, and 311.35 mg/kg	
and 303.2 mg/kg dry sediment dw;	
weight. 40 worms per treatment;	
artificial sediment: 1.8%	
organic carbon, grain	
size 100–2000 µm;	
Aquatic Vertebrates	+

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
1837-91-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	2-hour	NOAEL = 27.877 mg AI/L	0, 27.877 mg/L	In vitro, Nominal	Insulin-like growth factor 1 mRNA; Signal Transducer and Activator of Transcription	Reindl et al. (2011)	High	3586425
							protein 5			
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	24-hour	$LC_{50} = >100 \text{ mg AI/L}$	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal, Solvent: Acetone	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	1928289; 3586733; 1928275
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	48-hour	$LC_{50} = >100 \text{ mg AI/L}$	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal, Solvent: Acetone	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	96-hour	$LC_{50} = >100 \text{ mg AI/L}$	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal, Solvent: Acetone	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	96-hour	NOEC = >100 mg AI/L	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal, Solvent: Acetone	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	96-hour	NR-ZERO = >100 mg AI/L	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal, Solvent: Acetone	Abnormal behavior	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	24-hour	$LC_{50} = >100 \text{ mg AI/L}$	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	48-hour	$LC_{50} = >100 \text{ mg AI/L}$	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	96-hour	$LC_{50} = >100 \text{ mg AI/L}$	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	96-hour	NOEC = 100 mg AI/L	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal	Abnormal behavior	Great Lakes Chem Corp (1994)	Unacceptable	
25637-99-4	Bluegill (Lepomis macrochirus)	Fresh	96-hour	NR-ZERO = 100 mg AI/L	0, 10.0, 18.0, 32.0, 56.0, 100.0 mg/L	Static, Nominal	Mortality	Great Lakes Chem Corp (1994)	Unacceptable	
3194-55-6	Zebrafish (Danio rerio)	Fresh	72-hour	NOAEL = 32 mg AI/L	0, 32 mg/L	Static, Nominal	Thyroxine	Thienpont et al. (2011)	High	1062065

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	24-hour	$LC_{50} = >0.0025 \text{ mg}$ AI/L	0, 0.00075, 0.0015, 0.0023, 0.0023, 0.0025 mg/L	Flow-through, Measured. Solvent: DMF	Mortality	Wildlife Intl Ltd (1997b)	High	1928298; 3586422; 1928300
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	48-hour	$LC_{50} = >0.0025 \text{ mg}$ AI/L	0, 0.00075, 0.0015, 0.0023, 0.0023, 0.0025 mg/L	Flow-through, Measured, Solvent: DMF	Mortality	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	72-hour	LC ₅₀ = >0.0025 mg AI/L	0, 0.00075, 0.0015, 0.0023, 0.0023, 0.0025 mg/L	Flow-through, Measured, Solvent: DMF	Mortality	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	96-hour	LC ₅₀ = >0.0025 mg AI/L	0, 0.00075, 0.0015, 0.0023, 0.0023, 0.0025 mg/L	Flow-through, Measured, Solvent: DMF	Mortality	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	96-hour	NOEC = 0.0025 mg AI/L	0, 0.00075, 0.0015, 0.0023, 0.0023, 0.0025 mg/L	Flow-through, Measured	Mortality	Wildlife Intl Ltd (1997b)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	96-hour	NR-ZERO = >0.0025 mg AI/L	0, 0.00075, 0.0015, 0.0023, 0.0023, 0.0025 mg/L	Flow-through, Measured, Solvent: DMF	Mortality	Wildlife Intl Ltd (1997b)	High	
3194-55-6	Zebrafish (Danio rerio)	Not reported	47-hour	NOAEL = 0.128 mg AI/L	0, 0.001, 0.013, 0.128 mg/L	Renewal, Nominal, Solvent: DMSO	Hatching rate	Wu et al. (2013)	High	1927533
3194-55-6	Zebrafish (Danio rerio)	Not reported	47-hour	NOAEL = 0.013 mg AI/L; LOAEL = 0.128 mg AI/L	0, 0.001, 0.013, 0.128 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Wu et al. (2013)	High	
3194-55-6	Zebrafish (Danio rerio)	Not reported	59-hour	LOAEL = 0.001 mg AI/L	0, 0.001, 0.013, 0.128 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Wu et al. (2013)	High	
3194-55-6	Zebrafish (Danio rerio)	Not reported	71-hour	AI/L	0, 0.001, 0.013, 0.128 mg/L	Solvent: DMSO	Heart rate; T-box 5a mRNA; Homeobox protein Nkx-2.5 mRNA	Wu et al. (2013)	High	
3194-55-6	Zebrafish (Danio rerio)	Not reported	71-hour	NOAEL = 0.001 mg AI/L; LOAEL = 0.013 mg AI/L	0, 0.001, 0.013, 0.128 mg/L	Renewal, Nominal, Solvent: DMSO	Cardiac arrhythmia	Wu et al. (2013)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
3194-55-6	Zebrafish (Danio rerio)	Not reported	71-hour	NOAEL = 0.128 mg AI/L	0, 0.001, 0.013, 0.128 mg/ L	Renewal, Nominal, Solvent: DMSO	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2a mRNA; Troponin T type 2a (cardiac) mRNA; myH6 expression; End-diastolic Volume; Stroke volume; Caspase 3; Actin, alpha, cardiac muscle la mRNA; Myosin, heavy chain 6, cardiac muscle, alpha mRNA; Cardiac output; End-systolic Volume; Mortality; Abnormal; whole	Wu et al. (2013)	High	
3194-55-6	Zebrafish (Danio rerio)	Not reported	71-hour	NOAEL = 0.013 mg AI/L; LOAEL = 0.128 mg AI/L	0, 0.001, 0.013, 0.128 mg/L	Renewal, Nominal, Solvent: DMSO	malformation rate ATPase, Ca++ transporting, cardiac muscle, slow twitch 2b mRNA; Ryanodine receptor 2a (cardiac) mRNA	Wu et al. (2013)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	44-hour	NOEC = 0.01 mg AI/L; LOEC = 0.1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Du et al. (2012b)	High	1927610
134237-52-8	Zebrafish (Danio rerio)	Fresh	68-hour		0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Hatching success	Du et al. (2012b)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	92-hour	AI/L; LOEC = 1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Du et al. (2012b)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	92-hour		0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Length	Du et al. (2012b)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-52-8	Zebrafish (Danio rerio)	Fresh	92-hour	AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Mortality	<u>Du et al. (2012b)</u>	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	116-hour	AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal. Malformation rate	Du et al. (2012b)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	116-hour	AI/L; LOEC = 0.1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Reactive oxygen species; Caspase 3; Caspase 9	Du et al. (2012b)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	44-hour	NOEC = 0.01 mg AI/L; LOEC = 0.1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	<u>Du et al. (2012b)</u>	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	68-hour	NOEC = 0.01 mg AI/L; LOEC = 0.1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Hatching success	Du et al. (2012b)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	92-hour	AI/L; LOEC = 0.1 mg AI/L		Renewal, Nominal, Solvent: DMSO	Growth: Length; Heart rate; Mortality	Du et al. (2012b)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	116-hour	AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal. Malformation rate		High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	116-hour	NOEC = 0.01 mg AI/L; LOEC = 0.1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Reactive oxygen species	Du et al. (2012b)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	116-hour	NOEC = 0.1 mg AI/L; LOEC = 1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Caspase 3; Caspase 9	Du et al. (2012b)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	44-hour	NOEC = 0.1 mg AI/L; LOEC = 1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Du et al. (2012b)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	68-hour	AI/L; LOEC = 0.1 mg AI/L		Renewal, Nominal, Solvent: DMSO	Hatching success	Du et al. (2012b)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	92-hour	NOEC = 0.01 mg AI/L; LOEC = 0.1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Du et al. (2012b)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	92-hour		0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Length; Mortality	Du et al. (2012b)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	116-hour		0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal. Malformation rate	Du et al. (2012b)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-50-6	Zebrafish (Danio rerio)	Fresh	116-hour	AI/L; LOEC = 1 mg AI/L	0, 0.01, 0.1, 1.0 mg/L	Renewal, Nominal, Solvent: DMSO	Reactive oxygen species; Caspase 3; Caspase 9	Du et al. (2012b)	High	
3194-55-6	Zebrafish (Danio rerio)	Fresh	92-hour	LOAEL = 0.05 mg AI/L	0, 0.05, 0.1, 0.5, 1.0 mg/L	Aquatic-not reported, Nominal, Solvent: DMSO	Heart rate; bax mRNA; Mortality	Deng et al. (2009)	High	1927716
3194-55-6	Zebrafish (Danio rerio)	Fresh	92-hour	NOAEL = 0.05 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.05, 0.1, 0.5, 1.0 mg/L	Aquatic-not reported, Nominal, Solvent: DMSO	Growth: Length; Reactive oxygen species; Caspase- 3 mRNA expression profile; Caspase-9 mRNA expression profile; Growth: Abnormal malformation rate		High	
3194-55-6	Zebrafish (Danio rerio)	Fresh	96-hour	LOAEL = 0.002 mg AI/L	0, 0.002, 0.01, 0.1, 0.5, 2.5, 10 mg/L	Renewal, Nominal, Solvent: DMSO	Hatch delay	Hu et al. (2009)	High	1927732
25637-99-4										
25637-99-4	Zebrafish (Danio rerio)	Fresh	96-hour	NOAEL = 10 mg AI/L	0, 0.002, 0.01, 0.1, 0.5, 2.5, 10 mg/L	Renewal, Nominal, Solvent: DMSO	Mortality	Hu et al. (2009)	High	
25637-99-4	Zebrafish (Danio rerio)	Fresh	96-hour	NOAEL = 0.1 mg AI/L; LOAEL = 0.5 mg AI/L	0, 0.002, 0.01, 0.1, 0.5, 2.5, 10 mg/L	Renewal, Nominal, Solvent: DMSO	Malondialdehyde	Hu et al. (2009)	High	
25637-99-4	Zebrafish (Danio rerio)	Fresh	96-hour	NOAEL = 0.002 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.002, 0.01, 0.1, 0.5, 2.5, 10 mg/L	Renewal, Nominal, Solvent: DMSO	Heat shock protein 70	Hu et al. (2009)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	5-day	NOAEL = 0.00005 mg AI/L; Exp. 1	0, 0.000005, 0.00005 mg/L	Flow-through, Nominal, Solvent: Methanol	Growth: Length; Growth: Weight; Gonadosomatic index	Lower (2008)	High	3618094
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	5-day	NOAEL = 0.00005 mg AI/L; Exp. 2	0, 0.000005, 0.00005 mg/L	Flow-through, Nominal, Solvent: Methanol	Growth: Length; Growth: Weight; Gonadosomatic index	Lower (2008)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	5-day	NOAEL = 0.000017- 0.0003 mg AI/L	0, 0.000017- 0.0003 mg/L	Flow-through, Measured, Solvent: Methanol	Condition index: 5-day freshwater dosing period, 3- day transfer to salt water; Sodium potassium ATPase; 5-day freshwater dosing period, 3-day transfer to salt water; Thyroxine; 5-day freshwater dosing period, 3- day transfer to salt water; Triiodothyronine; 5-day freshwater dosing period, 3- day transfer to salt water;	Lower (2008)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	5-day	NOAEL = 0.00005 mg AI/L	0, 0.000005, 0.00005 mg/L	Flow-through, Nominal, Solvent: Methanol	salt water Trans-epithelial voltage gradient; Accessory reproductive fluid; Testosterone	Lower (2008)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	5-day	LOAEL = 0.000005 mg AI/L	0, 0.000005, 0.00005 mg/L	Flow-through, Nominal, Solvent: Methanol	11- Ketotestosterone; 17,20beta- Dihydroxy-4- pregnen-3-one	Lower (2008)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	30-day	NOEC = 0.000011	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Mortality, Growth: length; Condition Factor	<u>Lower (2008)</u>	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	30-day	LOEC = 0.000011	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Gill Na+/K+ ATPase activity; Plasma T4	Lower (2008)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	14-day	NOAEL = 0.5 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Pentylresorufin O-deethylase; Reactive oxygen species; 7- Ethoxyresorufin O-deethylase; Thiobarbituric acid reactive substances; Protein carbonyls; DNA damage; Superoxide dismutase (SOD) enzyme activity; Glutathione disulfide (oxidized glutathione)	Zhang et al. (2008)	High	1927768
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	28-day	NOAEL = 0.1 mg AI/L; LOAEL = 0.5 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Pentylresorufin O-deethylase; 7- Ethoxyresorufin O-deethylase; Superoxide dismutase (SOD) enzyme activity	Zhang et al. (2008)	High	
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	42-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Measured, Solvent: DMSO	Pentylresorufin O-deethylase; 7- Ethoxyresorufin O-deethylase; Thiobarbituric acid reactive substances	Zhang et al. (2008)	High	
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	28-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Reactive oxygen species; Protein carbonyls; DNA damage; Glutathione disulfide (oxidized glutathione)	Zhang et al. (2008)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	42-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Reactive oxygen species; Protein carbonyls; DNA damage; Superoxide dismutase (SOD) enzyme activity	Zhang et al. (2008)	High	
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	28-day	NOAEL = 0.5 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Thiobarbituric acid reactive substances	Zhang et al. (2008)	High	
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	42-day	LOAEL = 0.001 mg AI/L	0, 0.001, 0.01, 0.1, 0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Glutathione disulfide (oxidized glutathione)	Zhang et al. (2008)	High	
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	42-day	34 mg/kg	0.001mg/L	Renewal, Nominal, Solvent: DMSO	Residue; whole body HBCD concentration, wet weight	Zhang et al. (2008)	High	
25637-99-4	Chinese Rare Minnow (Gobiocypris rarus)	Fresh	42-day	654 mg/kg	0.5 mg/L	Renewal, Nominal, Solvent: DMSO	Residue: whole body HBCD concentration, wet weight	Zhang et al. (2008)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	7-day	NOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Triiodothyronine; Thyroxine; Sodium potassium ATPase	Lower and Moore (2007)	High	1927956
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	14-day	NOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Triiodothyronine; Thyroxine; Sodium potassium ATPase	Lower and Moore (2007)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	21-day	NOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol		Lower and Moore (2007)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	28-day	NOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol		Lower and Moore (2007)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	28-day	LOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Thyroxine;	Lower and Moore (2007)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	7-day	LOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Smell/Sniff	Lower and Moore (2007)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	17-day	LOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Smell/Sniff	Lower and Moore (2007)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	29-day	LOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Smell/Sniff	Lower and Moore (2007)	High	
25637-99-4	Atlantic salmon (Salmo salar)	Fresh	30-day	NOAEL = 0.000011 mg AI/L	0, 0.000011 mg/L	Flow-through, Measured, Solvent: Methanol	Mortality; Growth: Length; Growth: Weight; Condition index	Lower and Moore (2007)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	5-day	LOAEL = <500 mg AI/kg bdwt	0, < 500 mg/kg bdwt	Intraperitoneal, Nominal	Cytochrome P1A	Ronisz et al. (2004)	High	1927821
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	5-day	NOAEL = <500 mg AI/kg bdwt	0 50, < 500 mg/kg bdwt	Intraperitoneal, Nominal	DNA Adducts; 7- Ethoxyresorufin O-deethylase; Glutathione S- transferase	Ronisz et al. (2004)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	5-day	NOAEL = <500 mg AI/kg bdwt; Exp. 1	0, 50, < 500 mg/kg bdwt	Intraperitoneal, Nominal	Liver somatic index; Glutathione reductase	Ronisz et al. (2004)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	5-day	NOAEL = <500 mg AI/kg bdwt; Exp. 2	0, < 500 mg/kg bdwt	Intraperitoneal, Nominal	Liver somatic index; Glutathione reductase; Catalase	Ronisz et al. (2004)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	28-day	NOAEL = 50 mg AI/kg bdwt; LOAEL = <500 mg AI/kg bdwt	0, 50, < 500 mg/kg bdwt	Intraperitoneal, Nominal	Liver somatic index; 7-Ethoxy- resorufin O- deethylase	Ronisz et al. (2004)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	28-day	NOAEL = <500 mg AI/kg bdwt	0, 50, < 500 mg/kg bdwt	Intraperitoneal, Nominal	Glutathione reductase; Catalase; Glutathione S- transferase	Ronisz et al. (2004)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	5-day	LOAEL = 50 mg/kg bdwt; Exp. 1	0, 50, < 500 mg/kg bdwt	Intraperitoneal, Nominal	Catalase	Ronisz et al. (2004)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	5 days post fertilization	LOAEL = 0.005 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate	Hong et al. (2014)	High	2343684
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	LOAEL = 0.005 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Heart rate; Uncharacterized arginine/ serine- rich coiled-coil 1 mRNA	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	5 days post fertilization	$\begin{aligned} NOAEL &= 0.02 \text{ mg} \\ AI/L; \\ LOAEL &= 0.05 \text{ mg} \\ AI/L \end{aligned}$	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal; SV- BA distance	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	fertilization	NOAEL = 0.005 mg AI/L; LOAEL = 0.02 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Growth: Abnormal; SV- BA distance; Coiled coil domain containing 106 protein mRNA; Uncharacterized transmembrane and coiled-coil domain family 3 mRNA	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	5 days post fertilization	NOAEL = 0.05 mg AI/L; LOAEL = 0.2 mg AI/L	0, 0.02, 0.05, 0.2 mg/L	Renewal, Nominal, Solvent: DMSO	Caspase 3; Interleukin-1 beta		High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	NOAEL = 0.05 mg AI/L; LOAEL = 0.2 mg AI/L	0, 0.02, 0.05, 0.2 mg/L	Renewal, Nominal, Solvent: DMSO	Caspase 3; Caspase 8; Caspase 9; p53 mRNA; Interleukin-1 beta	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	5 days post fertilization	NOAEL = 0.2 mg AI/L	0, 0.02, 0.05, 0.2 mg/L	Renewal, Nominal, Solvent: DMSO	Caspase 8; Caspase 9	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	5 days post fertilization	NOAEL = 0.02 mg AI/L; LOAEL = 0.05 mg AI/L	0, 0.02, 0.05, 0.2 mg/L	Renewal, Nominal, Solvent: DMSO	p53 mRNA; Tumor necrosis factor-alpha	Hong et al. (2014)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	First fry	NOAEL = 0.05 mg AI/L; LOAEL = 0.2 mg AI/L	0, 0.02, 0.05, 0.2 mg/L	Renewal, Nominal, Solvent: DMSO	p53 mRNA; Interleukin-1 beta; Tumor necrosis factor- alpha	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	NOAEL = 0.2 mg AI/L	0, 0.02, 0.05, 0.2 mg/L	Renewal, Nominal, Solvent: DMSO	Tumor necrosis factor-alpha	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	6 days post fertilization		0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	8-Oxo-2'-deoxy- guanosine	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	LOAEL = 0.05 mg	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Uncharacterized polycomb protein mRNA; Uncharacterized short-chain dehydrogenase/reductase family mRNA; 40S ribosomal protein SA mRNA; Brain-type fatty acid binding protein mRNA		High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	NOAEL = 0.02 mg AI/L; LOAEL = 0.05 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO		Hong et al. (2014)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	LOAEL = 0.02 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Uncharacterized myosin regulatory light chain mRNA	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	LOAEL = 0.005 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Choriogenin L mRNA	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	LOAEL = 0.02 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Vitellogenin 2 mRNA	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	8 days post fertilization	NOAEL = 0.05 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Vitellogenin-like protein	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	17 days post fertilization	AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Abnormal; malformations	Hong et al. (2014)	High	
25637-99-4	Indian Medaka (Oryzias melastigma)	Salt	17 days post fertilization	NOAEL = 0.05 mg AI/L	0, 0.005, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: DMSO	Mortality; Hatching success; Hatchout time	Hong et al. (2014)	High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	5-day post fertilization	NOAEL = 0.0084- 0.0163 mg AI/L; LOAEL = 0.0165- 0.0324 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Heart rate	Hong et al. (2015)	High	3350507
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	LOAEL = 0.0084-	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Heart rate	Hong et al. (2015)	High	
134237-52-8		Salt	8-day post fertilization	NOAEL = 0.0165- 0.0324mg AI/L; LOAEL = 0.1212- 0.1568 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Growth, abnormal. SV- BA distance; Interleukin 1 beta mRNA; Tumor necrosis factor mRNA	Hong et al. (2015)	High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	LOAEL = 0.0084- 0.0163 mg AI/L	0, 0.0084-0.0163, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Caspase 3	Hong et al. (2015)	High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.0084- 0.0163 mg AI/L; LOAEL = 0.1212- 0.1568 mg AI/L	0, 0.0084-0.0163, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Caspase 8; Caspase 9	Hong et al. (2015)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint (s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.0084- 0.0163 mg AI/L; LOAEL = 0.0165- 0.0324 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	p53 mRNA	Hong et al. (2015)	High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	>8-<17-day post fertilization	NOAEL = 0.0017- 0.0324 mg AI/L; LOAEL = 0.1212- 0.1568 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	p53 mRNA, newly hatched larvae; Interleukin 1 beta mRNA, newly hatched larvae; Tumor necrosis factor mRNA; newly hatched larvae		High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	6-day post fertilization	NOAEL = 0.0017- 0.0324 mg AI/L; LOAEL = 0.1212- 0.1568 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	8-Oxo-2'- deoxyguanosine	Hong et al. (2015)	High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	17-day post fertilization	NOAEL = 0.0017- 0.0324 mg AI/L; LOAEL =0.1212- 0.1568 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Growth: Abnormal; Malformation rate	Hong et al. (2015)	High	
134237-52-8	Indian Medaka (Oryzias melastigma)	Salt	17-day post fertilization	NOAEL =0.1212- 0.1568 mg AI/L	0, 0.0084-0.0163, 0.0165-0.0324, 0.1212-0.1568 mg/L	Renewal, Measured, Solvent: DMSO	Mortality; Hatching rate	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	5-day post fertilization	LOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Heart rate	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	LOAEL = 0.0082- 0.0145 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Heart rate	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.021- 0.0341 mg AI/L; LOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Growth, abnormal. SV- BA distance; p53 mRNA; Tumor necrosis factor mRNA	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	LOAEL = 0.0082- 0.0145 mg AI/L	0, 0.0082-0.0145, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Caspase 3; Caspase 9	Hong et al. (2015)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint (s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.0082- 0.0145 mg AI/L; LOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Caspase 8	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	>8-<17-day post fertilization	NOAEL = 0.021- 0.0341 mg AI/L; LOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	p53 mRNA, newly hatched larvae; Tumor necrosis factor mRNA, newly hatched larvae	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.0082- 0.0145 mg AI/L; LOAEL = 0.0205- 0.0341 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Interleukin 1 beta mRNA	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	>8-<17-day post fertilization	NOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Interleukin 1 beta mRNA, newly hatched larvae	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	6-day post fertilization	NOAEL = 0.021- 0.0341 mg AI/L; LOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	8-Oxo-2'-deoxy- guanosine	Hong et al. (2015)	High	
134237-51-7	Indian Medaka (Oryzias melastigma)	Salt	17-day post fertilization	NOAEL = 0.1326- 0.1845 mg AI/L	0, 0.0082-0.0145, 0.0205-0.0341, 0.1326-0.1845 mg/L	Renewal, Measured, Solvent: DMSO	Growth: Abnormal, Malformation rate; Mortality; Hatching rate	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	5-day post fertilization	LOAEL = 0.0097- 0.0141 mg AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Heart rate	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	LOAEL = 0.0097- 0.0141 mg AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Heart rate	Hong et al. (2015)	High	
134237-50-6	(Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.024- 0.0375 mg AI/L LOAEL = 0.1252- 0.1684 mg AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Growth, Abnormal; SV-BA length; Tumor necrosis factor mRNA	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	LOAEL = 0.0097- 0.0141 mg AI/L	0, 0.0097-0.0141, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Caspase 3	Hong et al. (2015)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.0097- 0.0141 mg AI/l; LOAEL = 0.1252- 0.1684 mg AI/L	0, 0.0097-0.0141, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Caspase 8; Caspase 9	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	8-day post fertilization	NOAEL = 0.0097- 0.0141 mg AI/L; LOAEL = 0.0237- 0.0375 mg/AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	p53 mRNA; Interleukin 1 beta mRNA	Hong et al. (2015)) High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	>8-<17-day post fertilization	NOAEL = 0.024- 0.0375 mg AI/L; LOAEL = 0.1252- 0.1684 mg AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	p53 mRNA, newly hatched larvae; Interleukin 1 beta mRNA, newly hatched larvae; Tumor necrosis factor mRNA, newly hatched larvae	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	6-day post fertilization	NOAEL = 0.024- 0.0375 mg AI/L; LOAEL = 0.1252- 0.1684 mg AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	8-Oxo-2'- deoxyguanosine	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	17-day post fertilization	NOAEL = 0.024- 0.0375 mg AI/L; LOAEL = 0.1252- 0.1684 mg AI/L	0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Growth: Abnormal. Malformation rate	Hong et al. (2015)	High	
134237-50-6	Indian Medaka (Oryzias melastigma)	Salt	17-day post fertilization		0, 0.0097-0.0141, 0.0237-0.0375, 0.1252-0.1684 mg/L	Renewal, Measured, Solvent: DMSO	Mortality; Hatch rate	Hong et al. (2015)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cyp1b1 mRNA; 7-Ethoxyresorufin O-deethylase; Cytochrome P1A messenger RNA; Aryl hydrocarbon receptor 1b mRNA		High	3350537
134237-52-8	Zebrafish (Danio rerio)	Fresh	21-day	LOAEL = 0.001 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cyp1b1 mRNA	Du et al. (2015)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-52-8	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cytochrome P450, family 1, subfamily C, polypeptide 1 mRNA; Aryl hydrocarbon receptor 1a mRNA; Aryl hydrocarbon receptor 2 mRNA	Du et al. (2015)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cytochrome P450, family 1, subfamily C, polypeptide 1 mRNA; 7- Ethoxyresorufin O-deethylase; Cytochrome P1A messenger RNA; Aryl hydrocarbon receptor 1a mRNA; Aryl hydrocarbon receptor 1b mRNA; Aryl hydrocarbon receptor 1b mRNA; Aryl	Du et al. (2015)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Liver somatic index; Mortality	Du et al. (2015)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cyp1b1 mRNA; Cytochrome P450, family 1, subfamily C, polypeptide 1 mRNA; Aryl hydrocarbon receptor 1a mRNA; Aryl hydrocarbon receptor 2 mRNA	Du et al. (2015)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-51-7	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cyp1b1 mRNA; Cytochrome P450, family 1, subfamily C, polypeptide 1 mRNA; Cytochrome P1A messenger RNA; Aryl hydrocarbon receptor 1b mRNA	Du et al. (2015)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Cytochrome P1A messenger RNA; Aryl hydrocarbon receptor 1b mRNA	Du et al. (2015)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Aryl hydrocarbon receptor 2 mRNA	Du et al. (2015)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Aryl hydrocarbon receptor 1a mRNA; Liver somatic index; Mortality	<u>Du et al. (2015)</u>	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cyp1b1 mRNA; Cytochrome P450, family 1, subfamily C, polypeptide 1 mRNA; Aryl hydrocarbon receptor 1a mRNA; Aryl hydrocarbon receptor 1b mRNA	Du et al. (2015)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-50-6	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.001 mg AI/L; LOAEL = 0.01 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cyp1b1 mRNA; Cytochrome P450, family 1, subfamily C, polypeptide 1 mRNA; Aryl hydrocarbon receptor 1a mRNA; Aryl hydrocarbon receptor 1b mRNA; Aryl hydrocarbon receptor 2 mRNA	Du et al. (2015)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Aryl hydrocarbon receptor 2 mRNA	Du et al. (2015)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	7-Ethoxyresorufin O-deethylase; Cytochrome P1A messenger RNA	<u>Du et al. (2015)</u>	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.01 mg AI/L; LOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Cytochrome P1A messenger RNA	<u>Du et al. (2015)</u>	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	21-day	NOAEL = 0.1 mg AI/L	0, 0.001, 0.01, 0.1 mg/L	Renewal, Nominal, Solvent: DMSO	Liver somatic index; Mortality	Du et al. (2015)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.02284 mg AI/kg	0.00084, 0.02284 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; Thyroid gland epithelial cell height; Liver somatic index	Palace et al. (2010)	High	1403364

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-52-8	Zebrafish (Danio rerio)	Fresh	14-day	NOAEL = 0.02284 mg AI/kg	0.00084, 0.02284 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; 7- Ethoxyresorufin O-deethylase; T4 outer ring deiodinase enzyme activity; Thyroid gland epithelial cell height; Liver somatic index	Palace et al. (2010)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	56-day	LOAEL = 0.02284 mg AI/kg	0.00084, 0.02284 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; T4 outer ring deiodinase enzyme activity; Thyroid gland epithelial cell height	<u>Palace et al.</u> (2010)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	7-day	LOAEL = 0.02284 mg AI/kg	0.00084, 0.02284 mg/kg	Food, Measured; lipid- corrected	7-Ethoxyresorufin O-deethylase	Palace et al. (2010)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	56-day	NOAEL = 0.02284 mg AI/kg	0.00084, 0.02284 mg/kg	Food, Measured; lipid- corrected	7-Ethoxyresorufin O-deethylase; Liver somatic index; Uridine diphosphate glucuronyl transferase, UDP glucuronyl transferase	Palace et al. (2010)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	168- day*(112- day depuration period after 56-day exposure)	NOAEL = 0.02284 mg AI/kg	0.00084, 0.02284 mg/kg	Food, Measured; lipid- corrected	Growth: Weight	<u>Palace et al.</u> (2010)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-51-7	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.01184 mg AI/kg	0, 0.01184 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; Thyroid gland epithelial cell height; Liver somatic index	<u>Palace et al.</u> (2010)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	14-day	NOAEL = 0.01184 mg AI/kg	0, 0.01184 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; 7- Ethoxyresorufin O-deethylase; T4 outer ring deiodinase enzyme activity; Thyroid gland epithelial cell height; Liver somatic index	Palace et al. (2010)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	56-day	NOAEL = 0.01184 mg AI/kg	0, 0.01184 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroid gland epithelial cell height; Liver somatic index	Palace et al. (2010)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	56-day	LOAEL = 0.01184 mg AI/kg	0, 0.01184 mg/kg	Food, Measured; lipid- corrected	Thyroxine; 7- Ethoxyresorufin O-deethylase; T4 outer ring deiodinase enzyme activity; Uridine diphosphate glucuronyl transferase, UDP glucuronyl transferase	Palace et al. (2010)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	7-day	LOAEL = 0.01184 mg AI/kg	0, 0.01184 mg/kg	corrected	7-Ethoxyresorufin O-deethylase	<u>Palace et al.</u> (2010)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	168-day* (112-day depuration period after 56-day exposure)	NOAEL = 0.01184 mg AI/kg	0, 0.01184 mg/kg	Food, Measured; lipid- corrected	Growth: Weight rate	<u>Palace et al.</u> (2010)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-50-6	Zebrafish (Danio rerio)	Fresh	7-day	NOAEL = 0.02914 mg AI/kg	0.00047, 0.02914 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; Thyroid gland epithelial cell height; Liver somatic index	Palace et al. (2010)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	14-day	NOAEL = 0.02914 mg AI/kg	0.00047, 0.02914 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroxine; 7- Ethoxyresorufin O-deethylase; T4 outer ring deiodinase enzyme activity; Thyroid gland epithelial cell height; Liver somatic index	Palace et al. (2010)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	56-day	NOAEL = 0.02914 mg AI/kg	0.00047, 0.02914 mg/kg	Food, Measured; lipid- corrected	Triiodothyronine; Thyroid gland epithelial cell height; Liver somatic index	<u>Palace et al.</u> (2010)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	56-day	LOAEL = 0.02914 mg AI/kg	0.00047, 0.02914 mg/kg	Food, Measured; lipid- corrected	Thyroxine; 7- Ethoxyresorufin O-deethylase; T4 outer ring deiodinase enzyme activity; Uridine diphosphate glucuronyl transferase, UDP glucuronyl transferase	<u>Palace et al.</u> (2010)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	7-day	LOAEL = 0.02914 mg AI/kg	0.00047, 0.02914 mg/kg	Food, Measured; lipid- corrected	7-Ethoxyresorufin O-deethylase	<u>Palace et al.</u> (2010)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	168-day* (112-day depuration period after 56-day exposure)	NOAEL = 0.02914 mg AI/kg	0.00047, 0.02914 mg/kg	Food, Measured; lipid- corrected	Growth: Weight	<u>Palace et al.</u> (2010)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Steady-State BCF (edible tissue) = 6,531	0.00018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	1928244
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Steady-State BCF (edible tissue) = 4,650	0.0018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Steady-State BCF (non-edible tissue) = 20,726	0.00018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Steady-State BCF (non-edible tissue) = 12,866	0.0018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Steady-State BCF (whole body) = 13,085	0.00018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Steady-State BCF (whole body) = 8,974	0.0018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Kinetic BCF (edible tissue) = 14,039	0.00018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Kinetic BCF (edible tissue) = 9,826	0.0018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Kinetic BCF (non- edible tissue) = 30,242	0.00018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Kinetic BCF (non- edible tissue) = 23,303	0.0018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Kinetic BCF (whole body) = 21,940	0.00018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	35-day	Kinetic BCF (whole body) = 16,450	0.0018 mg/L	Flow-through, Measured, Solvent: Acetone	Residue; Bioconcentration	Wildlife Intl Ltd (2000)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Mortality; Weight; Length; Condition	Palace et al. (2008)	High	1409610

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 34	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	<u>Palace et al.</u> (2008)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 36	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery:muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	Palace et al. (2008)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 38	NOAEL = 0.005 mg/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	Palace et al. (2008)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 46	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue; intestine tissue, viscera tissue, liver tissue	Palace et al. (2008)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 46	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery:gallblad der tissue, thyroid tissue, blood	<u>Palace et al.</u> (2008)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 34	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Type II iodothyronine deiodinase	Palace et al. (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 32	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Mortality, Weight, Length, Condition	<u>Palace et al.</u> (2008)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 34	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	Palace et al. (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 36	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	<u>Palace et al.</u> (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 38	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue,	<u>Palace et al.</u> (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 46	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, intestine tissue , liver tissue	<u>Palace et al.</u> (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 38	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	<u>Palace et al.</u> (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 46	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery, gallbladder tissue, thyroid tissue, viscera tissue, blood	<u>Palace et al.</u> (2008)	High	
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 34	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Type II iodothyronine deiodinase	<u>Palace et al.</u> (2008)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 32	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Mortality, Weight, Length, Condition	Palace et al. (2008)	High	
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 34	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood; Type II iodothyronine deiodinase	<u>Palace et al.</u> (2008)	High	
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 36	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery:muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	Palace et al. (2008)	High	
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 38	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue	Palace et al. (2008)	High	
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 46	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: muscle tissue, gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue	<u>Palace et al.</u> (2008)	High	
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 38	NOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery: gallbladder tissue, thyroid tissue, intestine tissue, viscera tissue, liver tissue, blood	Palace et al. (2008)	High	
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	≥ 32-day, measured on day 46	LOAEL = 0.005 mg AI/kg	0, 0.005 mg/kg	Food, Nominal; Solvent: Corn oil	Thyroxine; % recovery, blood	<u>Palace et al.</u> (2008)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Common sole (Solea solea)	Salt	6-day	NOEC = 0.25 mg/L	0, 0.025, 0.08, 0.25 mg/L	Renewal, Nominal; Solvent: DMSO	Hatching success	Foekema et al. (2014)	High	2343709
25637-99-4	Common sole (Solea solea)	Salt	6-day exposure* followed by 34-day obs. In clean water	Internal Effect Concentration (IEC) ₅₀ = >12,400 mg/kg lipid weight	2,280 – 12,400 mg/kg lipid weight	Renewal, Measured	Mortality; Growth: completion of metamorphosis	Foekema et al. (2014)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	42-day	NOAEL = 0.04482 mg AI/kg	0, 0.00486, 0.04482 mg/kg dry wt	Food, Measured	Growth: Weight; % Lipid	<u>Du et al. (2012a)</u>	High	1927579
134237-52-8	Zebrafish (Danio rerio)	Fresh	42-day	NR-ZERO = 0.04482 $mg AI/kg$	0, 0.00486, 0.04482 mg/kg dry wt	Food, Measured	Mortality	<u>Du et al. (2012a)</u>	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	42-day	BMF = 7.61	0.0048 mg/kg dry wt	Food, Measured	Residue: biomagnification	Du et al. (2012a)	High	
134237-52-8	Zebrafish (Danio rerio)	Fresh	42-day	BMF = 7.76	0.04482 mg/kg dry wt	Food, Measured	Residue: biomagnification	Du et al. (2012a)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	42-day	NOAEL = 0.04748 mg AI/kg	0, 0.00452, 0.04748 mg/kg dry wt	Food, Measured	Growth: Weight; % Lipid	Du et al. (2012a)	High	
134237-51-7		Fresh	42-day	NR-ZERO = 0.04748 $mg AI/kg$		Food, Measured	Mortality	<u>Du et al. (2012a)</u>	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	42-day	BMF = 11.63	0.00452 mg/kg dry wt	Food, Measured	Residue: biomagnification	Du et al. (2012a)	High	
134237-51-7	Zebrafish (Danio rerio)	Fresh	42-day	BMF = 7.34	0.04748 mg/kg dry wt	Food, Measured	Residue: biomagnification	Du et al. (2012a)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	42-day	NOAEL = 0.04576 mg AI/kg	0, 0.00443, 0.04576 mg/kg dry wt	Food, Measured	Growth: Weight; % Lipid	Du et al. (2012a)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	42-day	NR-ZERO = 0.04576 mg AI/kg	0, 0.00443, 0.04576 mg/kg dry wt	Food, Measured	Mortality	Du et al. (2012a)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	42-day	BMF = 29.71	0.00443 mg/kg dry wt	Food, Measured	Residue: biomagnification	Du et al. (2012a)	High	
134237-50-6	Zebrafish (Danio rerio)	Fresh	42-day	BMF = 12.33	0.04576 mg/kg dry wt	Food, Measured	Residue: biomagnification	Du et al. (2012a)	High	
25637-99-4	Threespine Stickleback (Gasterosteus aculeatus)	Salt	30-day	NOAEL = 0.0003 mg AI/L	mg/L	Flow-through, Nominal, Solvent: Acetone	DNA methylation	Aniagu et al. (2008)	High	1412194
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	33-day	NOEC = 0.0037 mg AI/L	0, 0.00025, 0.00047, 0.00083, 0.0018, 0.0037 mg/L	Flow-through, Measured. Solvent: Acetone	Hatching success	<u>Drottar et al.</u> (2001)	High	4796184

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Rainbow trout (Oncorhynchus mykiss)	Fresh	61-day	NOEC = 0.0037 mg AI/L	0, 0.00025, 0.00047, 0.00083, 0.0018, 0.0037 mg/L	Flow-through, Measured. Solvent: Acetone	Mortality; Growth: Weight; Growth: Length; Time to Swim-up	Drottar et al. (2001)		
134237-52-8	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (gill) = 237	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	2343723
134237-52-8	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (viscera) = 584	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-52-8	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (muscle) = 221	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-52-8	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (skin) = 227	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-52-8	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (gill) = 950	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-52-8		Fresh	60-day	Lipid-Normalized Kinetic BCF (viscera) = 1,730	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-52-8	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (muscle) = 1,220	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-52-8		Fresh	60-day	Lipid-Normalized Kinetic BCF (skin) = 1,610	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (gill) = 322	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7		Fresh	60-day	Kinetic BCF (viscera) = 642	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7		Fresh	60-day	Kinetic BCF (muscle) = 187	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (skin) = 204	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-51-7	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (gill) = 1,290	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (viscera) = 1,900	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (muscle) = 1,030	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-51-7	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (skin) = 1,440	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (gill) = 8,580	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (viscera) = 11,500	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (muscle) = 5,570	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Kinetic BCF (skin) = 6,400	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (gill) = 34,500	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (viscera) = 34,200	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (muscle) = 30,700	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	
134237-50-6	Common Carp (Cyprinus carpio)	Fresh	60-day	Lipid-Normalized Kinetic BCF (skin) = 45,200	0, 0.001 mg/L	Renewal, Measured	Residue; Bioconcentration	Zhang et al. (2014b)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
25637-99-4	Starry, European Flounder (Platichthys flesus)	Brackish Fresh	78-day	mg/kg lipid diet with 800 mg/kg TOC sediment OR 0 mg/kg lipid diet with 8000 mg/kg TOC sediment	(mg/kg total organic carbon): 0/0; 0.3/0.08; 3/0.8; 30/8; 300/80; 3000/800; 0/8000	Multiple routes (diet and sediment), Nominal, Solvent: Acetone	Thyroxine; Aromatase; 7- Ethoxyresorufin O-deethylase; Triiodothyronine; Benzylresorufin O-deethylase; Pentylresorufin O-deethylase	<u>Kuiper et al.</u> (2007)	High	1412802
25637-99-4	Starry, European Flounder (Platichthys flesus)	Brackish	78-day	mg/kg TOC sediment; LOAEL = 300 mg/kg lipid diet with 80 mg/kg TOC	Diet (mg/kg lipid)/sediment (mg/kg total organic carbon): 0/0; 0.3/0.08; 3/0.8; 30/8; 300/80; 3000/800; 0/8000	Multiple routes (diet and sediment), Nominal, Solvent: Acetone	Residue: α- HBCD concentration in muscle; β-HBCD concentration in muscle	<u>Kuiper et al.</u> (2007)	High	
25637-99-4	Starry, European Flounder (Platichthys flesus)	Brackish	78-day	LOAEL = 0.3 mg/kg lipid diet with 0.08 mg/kg TOC sediment	Diet (mg/kg lipid)/sediment (mg/kg total organic carbon): 0/0; 0.3/0.08; 3/0.8; 30/8; 300/80; 3000/800; 0/8000	Multiple routes (diet and sediment), Nominal, Solvent: Acetone	Residue; γ-HBCD concentration in muscle	<u>Kuiper et al.</u> (2007)	High	
134237-52-8	Rainbow trout (Oncorhynchus mykiss)	Fresh	168-day (56-day exposure to treated food then 112 days untreated food)	BMF = 7.2	0.0003, 0.02284 mg/kg	Food, Measured; Lipid- corrected	Residue; biomagnification	Law et al. (2006)	High	1443861
134237-51-7	Rainbow trout (Oncorhynchus mykiss)	Fresh	168-day (56-day exposure to treated food then 112 days untreated food)		0.0003, 0.01184 mg/kg	Food, Measured; Lipid- corrected	Residue; biomagnification	Law et al. (2006)	High	

CAS RN	Test Species	Water Type	Duration	Endpoint(s)	Concentration(s)	Test Analysis	Effect(s)	References	Data Quality Rating	HERO ID
134237-50-6	Rainbow trout (Oncorhynchus mykiss)	Fresh	168-day (56-day exposure to treated food then 112 days untreated food)	BMF = 9.2	0.0003, 0.02914 mg/kg	Food, Measured; Lipid- corrected	Residue; biomagnification	Law et al. (2006)	High	
Amphibians										
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	1-day	NOAEL = 6.417 mg AI/L	0, 0.64, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Developmental: Tail resorption	Schriks et al. (2006)	High	938764
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	2-day	NOAEL = 6.417mg AI/L	0, 0.64, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Developmental: Tail resorption	Schriks et al. (2006)	High	
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	3-day	NOAEL = 6.417 mg AI/L	0, 0.64, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Developmental: Tail resorption	Schriks et al. (2006)	High	
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	4-day	NOAEL = 6.417 mg AI/L	0, 0.64, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Developmental: Tail resorption	Schriks et al. (2006)	High	
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	5-day	NOAEL = 6.417 mg AI/L	0, 0.64, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Developmental: Tail resorption	Schriks et al. (2006)	High	
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	6-day	NOAEL = 6.417 mg AI/L	0, 0.64, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Developmental: Tail resorption	Schriks et al. (2006)	High	
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	8-day	NOAEL = 0.642 mg AI/L	0, 0.64 mg/L	Renewal, Nominal, Solvent: DMSO	Cell proliferation	Schriks et al. (2006)	High	
25637-99-4	African clawed frog (Xenopus laevis)	Fresh	8-day	NR-ZERO = 0.642 mg AI/L	0, 0.64 mg/L	Renewal, Nominal, Solvent: DMSO	Mortality	Schriks et al. (2006)	High	

Table 2. On-topic terrestrial toxicity studies that were evaluated for HBCD

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
Terrestrial Veg	etation									
3194-55-6	Corn (Zea mays)	53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %.	21-day	NOEC = 5,000 mg/kg dry soil (Nominal) NOEC = 6,200 mg/kg dry soil (Mean Measured)	Nominal test levels; 40, 105, 276, 725, 1904, 5,000 mg/kg dry soil Mean measured test levels; 31.3, 97.8, 297, 764, 2230, and 6200 mg /kg dry soil		No effects on seedlings emergence, survival, dry weight or height at the highest test level	Porch et al. (2002)	High	3809141
3194-55-6	Cucumber (Cucumis sativa)	53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %.	21-day	NOEC = 5,000 mg/kg dry soil (Nominal) NOEC = 6,200 mg/kg dry soil (Mean Measured)			No effects on seedlings emergence, survival, dry weight or height at the highest test level	Porch et al. (2002)	High	
3194-55-6	Onion (Allium cepa)	53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %.	21-day	NOEC = 5,000 mg/kg dry soil (Nominal) NOEC = 6,200 mg/kg dry soil (Mean Measured)		53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %. Soil pH was 7.5. Solvent; Tetrahydrofuran (THF)	No effects on seedlings emergence, survival, dry weight or height at the highest test level	Porch et al. (2002)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
3194-55-6	Ryegrass (Lolium perenne)	53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %.	21-day	NOEC = 5,000 mg/kg dry soil (Nominal) NOEC = 6,200 mg/kg dry soil (Mean Measured)	Nominal test levels; 40, 105, 276, 725, 1904, 5,000 mg/kg dry soil Mean measured test levels; 31.3, 97.8, 297, 764, 2230, and 6200 mg /kg dry soil		No effects on seedlings emergence, survival, dry weight or height at the highest test level	Porch et al. (2002)	High	
3194-55-6	Soybean (Glycine max)	53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %.	21-day	NOEC = 5,000 mg/kg dry soil (Nominal) NOEC = 6,200 mg/kg dry soil (Mean Measured)			No effects on seedlings emergence, survival, dry weight or height at the highest test level		High	
3194-55-6	Tomato (Lycopersicon esculentum)	53 % sand, 30 % silt and 17 % clay with an organic content of 1.9 %.	21-day	NOEC = 5,000 mg/kg dry soil (Nominal) NOEC = 6,200 mg/kg dry soil (Mean Measured)			No effects on seedlings emergence, survival, dry weight or height at the highest test level	Porch et al. (2002)		
134237-52-8	Corn (Zea mays)	Hydroponic	3-hour	LOAEL = 0.002 mg/L		Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots	Wu et al. (2012)	High	1927583

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Corn (Zea mays)	Hydroponic	7-hour	LOAEL = 0.002 mg/L		Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	12-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-52-8	mays)	Hydroponic	24-hour	LOAEL = 0.002 mg/L		Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots; Histone H2AX mRNA: Relative γ- H2AX level in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	72-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Corn (Zea mays)	Hydroponic	96-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	7-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	12-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	72-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	96-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots; Growth: Inhibition of seed germination; Growth: Inhibition of root biomass; Growth: Inhibition of shoot biomass; Growth: Root elongation; Growth: Shoot elongation	Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Corn (Zea mays)	Hydroponic	3-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-52-8	Corn (Zea mays)	Hydroponic	24-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Histone H2AX mRNA: Relative γ-H2AX level in roots	Wu et al. (2012)	High	
134237-51-7	Corn (Zea mays)	Hydroponic	3-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-51-7	Corn (Zea mays)	Hydroponic	7-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-51-7	Corn (Zea mays)	Hydroponic	12-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-51-7	Corn (Zea mays)	Hydroponic	24-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal		Wu et al. (2012)	High	
134237-51-7	Corn (Zea mays)	Hydroponic	72-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal		Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-51-7	Corn (Zea mays)	Hydroponic	96-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-51-7	Corn (Zea mays)	Hydroponic	3-hour	LOAEL = 0.002 mg/L		Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots	Wu et al. (2012)	High	
134237-51-7	Corn (Zea mays)	Hydroponic	72-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots	Wu et al. (2012)	High	
134237-51-7	mays)	Hydroponic		LOAEL = 0.002 mg/L		Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots; Growth: Inhibition of seed germination; Growth: Inhibition of root biomass; Growth: Inhibition of shoot biomass; Growth: Root elongation; Growth: Shoot elongation	Wu et al. (2012)	High	
134237-50-6	Corn (Zea mays)	Hydroponic	3-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots;	Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Corn (Zea mays)	Hydroponic	7-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-50-6	Corn (Zea mays)	Hydroponic	12-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal		Wu et al. (2012)	High	
134237-50-6	Corn (Zea mays)	Hydroponic	24-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Corn (Zea mays)	Hydroponic	72-hour	LOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots, Radical relative intensity in shoots; Histone H2AX mRNA: Relative γ-H2AX level in roots	Wu et al. (2012)	High	
134237-50-6	Corn (Zea mays)	Hydroponic	96-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in roots; Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
134237-50-6	mays)	Hydroponic	96-hour	LOAEL = 0.002 mg/L		Hydroponic solution application, Nominal	Reactive oxygen species: Radical relative intensity in shoots; Growth: Inhibition of seed germination; Growth: Inhibition of root biomass; Growth: Inhibition of shoot biomass; Growth: Root elongation; Growth: Shoot elongation	Wu et al. (2012)	High	
134237-50-6	Corn (Zea mays)	Hydroponic	3-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Histone H2AX mRNA: Relative γ-H2AX level in roots, Relative γ-H2AX level in shoots	Wu et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Corn (Zea mays)	Hydroponic	72-hour	NOAEL = 0.002 mg/L	0, 0.002 mg/L	Hydroponic solution application, Nominal	Histone H2AX mRNA: Relative γ-H2AX level in shoots	Wu et al. (2012)	High	
25637-99-4	Corn (Zea mays)	Filter paper	4-day	LOAEL = 0.002 mg/L	0, 0.002, 0.005, 0.01, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: Methanol	Growth: Root biomass; Growth: Root length; Growth: Shoot biomass; Germination	Wu et al. (2016)	High	3350472
25637-99-4	Corn (Zea mays)	Filter paper	4-day	NOAEL = 0.002 mg/L; LOAEL = 0.005 mg/L	0, 0.002, 0.005, 0.01, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: Methanol	Growth: Shoot length; Histone H2AX mRNA: Root	Wu et al. (2016)	High	
25637-99-4	Corn (Zea mays)	Filter paper	4-day	NOAEL = 0.005 mg/L; LOAEL = 0.01 mg/L	0, 0.002, 0.005, 0.01, 0.02, 0.05 mg/L	Renewal, Nominal, Solvent: Methanol	Histone H2AX mRNA: Shoot	Wu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (root) =0.550	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber, Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	3350492
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (stem) = 0.100	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (leaf) = 0.157	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (root) = 0.961	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (stem) = 0.203	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (leaf) = 0.259	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (root) = 1.27	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber, Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (stem) = 0.284	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (leaf) = 0.473	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (root) = 1.99	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (stem) = 0.472	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (leaf) = 0.755	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (root) = 1.10	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (stem) = 0.231	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (leaf) = 0.134	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (root) = 1.36	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (stem) = 0.315	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (leaf) = 0.175	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (root) = 2.07	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber, Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (stem) = 0.514	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (leaf) = 0.335	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (root) = 3.08	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (stem) = 0.842	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (leaf) = 0.604	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (root) = 1.28	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (stem) = 0.286	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	1-week	BCF (leaf) = 0.141	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (root) = 1.63	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (stem) = 0.405	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	2-week	BCF (leaf) = 0.225	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (root) = 2.13	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (stem) = 0.606	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	3-week	BCF (leaf) = 0.337	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (root) = 3.21	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (stem) = 0.880	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	4-week	BCF (leaf) = 0.663	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Bioconcentration	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	1-week	TF = 0.177	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	2-week	TF = 0.206	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber, Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	3-week	TF = 0.203	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Bread Wheat (Triticum aestivum)	Natural soil	4-week	TF = 0.216	0, 0.0628 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	1-week	TF = 0.202	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber, Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	2-week	TF = 0.224	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	3-week	TF = 0.242	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-51-7	Bread Wheat (Triticum aestivum)	Natural soil	4-week	TF = 0.264	0, 0.0908 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	1-week	TF = 0.218	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Bread Wheat (Triticum aestivum)	Natural soil	2-week	TF = 0.244	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-50-6	(Triticum aestivum)	Natural soil	3-week	TF = 0.280	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
134237-50-6	(Triticum aestivum)	Natural soil	4-week	TF = 0.269	0, 0.0984 mg/kg dry soil	Multiple routes within environ- mental exposure chamber Measured, Solvent: Methylene chloride	Residue; Translocation factor (TF: [stem]/ [root])	Zhu et al. (2016)	High	
Terrestrial Inve		1		T	T	T	T			,
3194-55-6	Earthworm (Eisenia fetida)		28-day	EC50 = >4,190 mg/kg	61.2, 145, 244, 578, 1150, 2180, and 4190 mg /kg dry soil <0.200 (control), 3.40, 7.32, 16.8, 15.3,53.0, 71.2, and 150 µg/gram of tissue	Measured	Survival	Aufderheide et al. (2003)	High	3809173
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	28-day	EC10 = >4,190 mg/kg	61.2, 145, 244, 578, 1150, 2180, and 4190 mg /kg dry soil	Measured	Survival	Aufderheide et al. (2003)	High	
3194-55-6	Earthworm (Eisenia fetida)		28-day	NOEC = >4,190 mg/kg	61.2, 145, 244, 578, 1150, 2180, and 4190 mg /kg dry soil	Measured	Survival	Aufderheide et al. (2003)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	56-day	EC ₅₀ = 771 mg/kg (225 to 4,900 mg/kg)	51.5, 128, 235,543, 1,070, 2,020, and 3,990 mg/kg dry soil	Measured	Reproduction	Aufderheide et al. (2003)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	56-day	$EC_{10} = 21.6 \ mg/kg \\ (0.000468 \ to \ 110 \\ mg/kg)$	51.5, 128, 235,543, 1,070, 2,020, and 3,990 mg/kg dry soil	Measured	Reproduction	Aufderheide et al. (2003)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	56-day	NOEC = 128 mg/kg	51.5, 128, 235, 543, 1,070, 2,020, and 3,990 mg/kg dry soil	Measured	Reproduction	Aufderheide et al. (2003)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	56-day	LOEC = 235 mg/kg	51.5, 128, 235,543, 1,070, 2,020, and 3,990 mg/kg dry soil	Measured	Reproduction	Aufderheide et al. (2003)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	56-day	GMATC = 173 mg/kg	51.5, 128, 235,543, 1,070, 2,020, and 3,990 mg/kg dry soil	Measured	Reproduction	Aufderheide et al. (2003)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	0-4-day	NOAEL = 400 mg AI/kg	0, 50, 100, 200, 400 mg/kg dry soil	Static, Nominal, Solvent: Acetone	Growth rate	Shi et al. (2015)	High	2965902
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	4-7-day	NOAEL = 400 mg AI/kg	0, 50, 100, 200, 400 mg/kg dry soil	Static, Nominal, Solvent: Acetone	Growth rate	Shi et al. (2015)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	7-10-day	NOAEL = 400 mg AI/kg	0, 50, 100, 200, 400 mg/kg dry soil	Static, Nominal, Solvent: Acetone	Growth rate	Shi et al. (2015)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	10-14-day	NOAEL = 400 mg AI/kg	0, 50, 100, 200, 400 mg/kg dry soil	Static, Nominal, Solvent: Acetone	Growth rate	Shi et al. (2015)	High	
3194-55-6	Earthworm (Eisenia fetida)		14-day	NOAEL = 400 mg AI/kg	0, 50, 100, 200, 400 mg/kg dry soil	Static, Nominal, Solvent: Acetone	Growth rate Catalase mRNA	Shi et al. (2015)	High	
3194-55-6	Earthworm (Eisenia fetida)	Artificial soil	14-day	NOAEL = 200 mg AI/kg; LOAEL = 400 mg AI/kg	0, 50, 100, 200, 400 mg/kg dry soil	Static, Nominal, Solvent: Acetone	Superoxide dismutase mRNA; HSP70 mRNA	Shi et al. (2015)	High	
134237-52-8	Earthworm (Eisenia fetida)	Natural soil	21-day		0, 0.172 mg/g dry soil	Static, Measured, Solvent: Unspecified	Residue; Bioaccumulation	Li et al. (2016)	Low	3350510
134237-52-8	Earthworm (Metaphire guillelmi)	Natural soil	21-day	BAF = 1.16	0, 0.172 mg/g dry soil	Static, Measured, Solvent: Unspecified	Residue; Bioaccumulation	Li et al. (2016)	Low	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-51-7	Earthworm (Eisenia fetida)	Natural soil	21-day	BAF = 2.28	0, 0.156 mg/g dry soil	Static, Measured, Solvent: Unspecified	Residue; Bioaccumulation	Li et al. (2016)	Low	
134237-51-7	(Metaphire guillelmi)	Natural soil	21-day	BAF = 2.81	0, 0.156 mg/g dry soil	Static, Measured, Solvent: Unspecified	Residue; Bioaccumulation	<u>Li et al. (2016)</u>	Low	
134237-50-6	(Eisenia fetida)		21-day	BAF = 21.8	0, 0.186 mg/g dry soil	Static, Measured, Solvent: Unspecified	Residue; Bioaccumulation	<u>Li et al. (2016)</u>	Low	
134237-50-6	(Metaphire guillelmi)	Natural soil	21-day	BAF = 6.21	0, 0.186 mg/g dry soil	Static, Measured, Solvent: Unspecified	Residue; Bioaccumulation	Li et al. (2016)	Low	
Terrestrial Vert	tebrates									
134237-50-6	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes Culture of	24-hour	NOAEL = 0.06 mg/L; LOAEL = 0.6 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Cytochrome P450 2H1 mRNA; UGT- 1A9; Fatty acid- binding protein 10- A, liver basic mRNA; Cyto- chrome P450 3A37 mRNA Cytochrome P450	Crump et al. (2008) Crump et al.	High High	1408111
10.120, 00 0	chicken	embryonic hepatocytes	30 H341	mg/L; LOAEL = 0.06 mg/L	0.6, 1.9, 6.4 mg/L	Solvent: DMSO	2H1 mRNA	(2008)	111811	
134237-50-6	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	36-hour	NOAEL = 0.06 mg/L; LOAEL = 0.6 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	<i>In vitro</i> , Nominal, Solvent: DMSO	UGT- 1A9; Fatty acid-binding protein 10-A, liver basic mRNA; Cyto- chrome P450 3A37 mRNA	<u>Crump et al.</u> (2008)	High	
134237-50-6	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	24-hour	NOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	<i>In vitro</i> , Nominal, Solvent: DMSO	Xenobiotic-sensing orphan nuclear receptor (CXR) mRNA	<u>Crump et al.</u> (2008)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	24-hour	NOAEL = 1.9 mg/L; LOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Transthyretin (pre- albumin, amyloid- osis type I) mRNA; Thyroid hormone responsive spot 14 alpha mRNA	<u>Crump et al.</u> (2008)	High	
134237-50-6	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	36-hour	NOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Trans-thyretin (pre- albumin, amyloid- osis type I) mRNA	<u>Crump et al.</u> (2008)	High	
134237-50-6	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	36-hour	NOAEL = 1.9 mg/L; LOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	<i>In vitro</i> , Nominal, Solvent: DMSO	Thyroid hormone responsive spot 14 alpha mRNA	<u>Crump et al.</u> (2008)	High	
134237-50-6 HBCD- Technical Mixture	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	24-hour	NOAEL = 0.06 mg/L; LOAEL = 0.6 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Thyroid hormone responsive spot 14 alpha mRNA; Cyto- chrome P450 2H1 mRNA; Cyto- chrome P450 3A37 mRNA	<u>Crump et al.</u> (2008)	High	
134237-50-6 HBCD- Technical Mixture	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	36-hour	NOAEL = 0.06 mg/L; LOAEL = 0.6 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Thyroid hormone responsive spot 14 alpha mRNA; Fatty acid-binding protein 10-A, liver basic mRNA; Cyto- chrome P450 2H1 mRNA; Cyto- chrome P450 3A37 mRNA	<u>Crump et al.</u> (2008)	High	
134237-50-6 HBCD- Technical Mixture	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	24-hour	NOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	UGT- 1A9	<u>Crump et al.</u> (2008)	High	
134237-50-6 HBCD- Technical Mixture	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	36-hour	NOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	UGT- 1A9; Trans- thyretin (pre- albumin, amyloid- osis type I) mRNA	<u>Crump et al.</u> (2008)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-50-6 HBCD- Technical Mixture	Domestic chicken (Gallus domesticus)	Culture of embryonic hepatocytes	24-hour	NOAEL = 1.9 mg/L; LOAEL = 6.4 mg/L	0, 0.006, 0.06, 0.6, 1.9, 6.4 mg/L	In vitro, Nominal, Solvent: DMSO	Transthyretin (pre- albumin, amyloid- osis type I) mRNA; Fatty acid-binding protein 10-A, liver basic mRNA	<u>Crump et al.</u> (2008)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	1-day	NOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	1927629
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	4-day	NOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	8-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	11-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	16-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 1 day depuration	LOAEL = 0.001 mg A/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 3 days depuration	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 8 days depuration	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 18 days depuration	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Abdominal fat	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	1-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	4-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	8-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	11-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	16-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day	LOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 1 day depuration	NOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	-
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 3 days depuration	NOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 8 days depuration	NOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day, 18 days depuration	NOAEL = 0.001 mg AI/kg food	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioaccumulation in Liver	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day	BCF (egg yolk) = 0.4	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioconcentration	Fournier et al. (2012)	High	
134237-52-8	Domestic chicken (Gallus domesticus)	Diet	21-day	BCF (liver) = 0.3	0, 0.001 mg/kg food	Food, Nominal, Solvent: Rapeseed oil	Residue: Bioconcentration	Fournier et al. (2012)	High	
25637-99-4	American Kestrel (Falco sparverius)	Diet	4 weeks prior to pairing, continuing through incubation until 2 days prior to hatch	LOAEL (males and females) = 0.51 mg AI/kg food	0, 0.51 mg/kg- bw/day	Food, Nominal, Solvent: Safflower oil	Decreased activity, general: measured during courtship, measured at 5 days after pairing	Marteinson et al. (2012)	High	1927590

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
25637-99-4	American Kestrel (Falco sparverius)	Diet	4 weeks prior to pairing, continuing through incubation until 2 days prior to hatch	LOAEL (males) = 0.51 mg/kg-bw/day	0, 0.51 mg/kg- bw/day	Food, Nominal, Solvent: Safflower oil	Decreased activity, general and flying measured during brood-rearing; Courtship behavior: Reduced vocalizations, effect observed throughout courtship; Pairbonding nesting behavior: Reduced Displays; Care of young, nest attentiveness: Reduced frequency of entry into nestbox and Decreased food retrieval	Marteinson et al. (2012)	High	
25637-99-4	American Kestrel (Falco sparverius)	Diet	4 weeks prior to pairing, continuing through incubation until 2 days prior to hatch	LOAEL (females) = 0.51 mg/kg- bw/day	0, 0.51 mg/kg- bw/day	Food, Nominal, Solvent: Safflower oil	Courtship behavior: Reduced vocalizations, effect observed only at 5 days after pairing, Reduced courtship displays, effect observed at 5 days after pairing; Pair- bonding nesting behavior: Increased displays; Care of young, nest attentiveness: Increased frequency of entry into nest- box and Increased food retrieval	Marteinson et al. (2012)	High	

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
25637-99-4	American Kestrel (Falco sparverius)	Diet	4 weeks prior to pairing, continuing through incubation until 2 days prior to hatch	LOAEL = 0.51 mg/kg-bw/day	0, 0.51 mg/kg- bw/day	Food, Nominal, Solvent: Safflower oil	Reduced mass of first egg; Care of young, nest attentiveness: Incubation nest temperature	Marteinson et al. (2012)	High	
25637-99-4	American Kestrel (Falco sparverius)	Diet	75 days: 3 weeks prior to pairing, continuing through incubation until first chick hatched	LOAEL = 0.51 mg AI/kg food	0, 0.51 mg/kg- bw/day	Food, Nominal, Solvent: Safflower oil	Residue: Accumulation in Eggs; Reproductive: Decreased time to first egg laid after pairing, decreased clutch size, decreased egg volume per clutch, decreased egg volume per pair, decreased egg mass per clutch, Decreased egg mass at mid-incubation, Increased egg weight loss at mid-incubation		High	1401837

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
25637-99-4	American Kestrel (Falco sparverius)	Diet	75 days: 3 weeks prior to pairing, continuing through incubation until first chick hatched	NOAEL = 0.51 mg AI/kg food	0, 0.51 mg/kg- bw/day	Food, Nominal, Solvent: Safflower oil	Lipid concentration in eggs; Reproductive: Egg shell thickness, Overall hatching success (number of hatchlings), Overall reproductive success (number of fledglings per brood/number of eggs per female), Fertility (percentage fertile eggs laid per female), Hatching success (percentage hatchlings of fertile eggs per female), Fledgling success (percentage fledglings of hatchlings per female)	Fernie et al. (2011)	High	
25637-99-4	American Kestrel (Falco sparverius)	Diet exposed	21-day	LOAEL	3.27 ng/g ww (low exposure)	Food, Nominal, Solvent: Safflower oil	Reproduction	Marteinson et al. (2010)	High	1927669
25637-99-4	American Kestrel (Falco sparverius)	Diet exposed	21-day	LOAEL	15.61 ng/g ww (high exposure)	Food, Nominal, Solvent: Safflower oil	Reproduction	Marteinson et al. (2010)	High	
25637-99-4	American Kestrel (Falco sparverius)	Diet exposed	21-day	LOAEL	0.51 mg/kg-day	HBCD dissolved in safflower oil was injected into the brains of dead cockerels daily; kestrels fed from the cockerels <i>ad libitum</i> and received a dose of approximately 0.51 mg/kg-day.	Increased testes weight in unpaired males	Marteinson et al. (2011)	High	1927624

CASRN	Test Species	Media	Duration	Endpoint	Concentration(s)	Test Analysis	Effect(s)	Reference	Data Quality Rating	HERO ID
25637-99-4	American Kestrel (Falco sparverius)	Diet	21-day exposure; 25-day depuration	Depletion rate = 0.22 ng/g Day	800 ng/g ww	in safflower oil and injected into their cockerel [brain] diet), followed by a 25-d depuration period.	Increase update of alpha-HBCDD, especially in fat and eggs	Letcher et al. (2015)	High	3350539
3194-55-6	Japanese Quail (Coturnix japonica)	Diet	6-week	LOAEL= 17.5 mg/kg/day	0, 17.5, 33.4, 61.5 or 126.9 mg/kg/day	Food exposure	Reduction in eggshell thickness; reduction in hatchability	MOEJ (2009)	High	3809153
3194-55-6	Japanese Quail (Coturnix japonica)	Diet	6-week	LOAEL= 2.1 mg/kg/day	0, 17.5, 33.4, 61.5 or 126.9 mg/kg/day	Food exposure	Reduction in hatchability	Zhang et al. (2014a)	High	2528343
3194-55-6	Japanese Quail (Coturnix japonica)	Diet	6-week	NOAEL = 0.7 mg/kg/day	0, 17.5, 33.4, 61.5 or 126.9 mg/kg/day	Food exposure	reproductive performance	Zhang et al. (2014a)	High	

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