SI Table 1 Toxicity data for chlorpyrifos in aquatic organisms

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure µg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Algae										**Assessment of methods**							
Bellerochea polymorpha	Pop G		2	EC50	240	NA	F	NR	U	2	2	5	2	2.75	N	SW	(Walsh et al. 1988)
Dunaliella tertiolecta	Pop GR		4	EC50	769	727-814	A	S	U	3	1	5	3	3	Q	SW	(DeLorenzo and Serrano 2003)
Isochrysis galbana	Pop G		4	EC50	138		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Scenedesmus bijugatus	Mort		10	LC50	2000		F	S	U						N	FW	(Pal et al. 1999)
Skeletonema costatum	Pop G		4	EC50	255		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Skeletonema costatum	Pop G		4	EC50	289		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Skeletonema costatum	Pop G		4	EC50	297		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Skeletonema costatum	Pop G		4	EC50	326		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Skeletonema costatum	Pop G		4	EC50	328		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Skeletonema costatum	Pop G		3	EC50	640	NA	F	NR	U	2	2	5	2	2.75	N	SW	(Walsh et al. 1988)
Thalassiosira pseudonana	Pop G		4	EC50	148		F	S	U						Q*	SW	(Borthwick and Walsh 1981)
Amphibia																	
Hoplobatrachus tigerinus	Mort		4	LC50	19		F	NR	U						N	FW	(Abbasi and Soni 1991)
Lithobates clamitans clamitans	Mort	8-d	4	EC50	236	211.6–263.1	A 99%	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Pseudacris regilla	Mort		4	LC50	122		F	S	U	3	1	3	3	2.5	N	FW	(Kerby 2006)
Rana boylii	Mort		1	LC50	3005	993-157000	A	S	U	3	1	3	3	2.5	N	FW	(Sparling and Fellers 2007)
Rana boylii	Mort		4	LC50	205		F	S	U	3	1	3	3	2.5	N	FW	(Kerby 2006)
Rana dalmatina	Mort	G25	4	LC50	5174	4537-5919	A	S	M	3	2	5	3	3.25	Q	FW	(Bernabò et al. 2011)
Rana limnocharis	Mort		2	LC50	2401		F	NR	U						N	FW	(Pan and Liang 1993)
Xenopus laevis	Mort	G35	4	EC50	115	94.26–140.5	A	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Xenopus laevis	Mort	G45	4	EC50	156	130.6–185.5	A	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Xenopus laevis	Mort	NF 46	4	LC50	560	200-1620	F	S	U	4	3	5	3	3.75	Q	FW	(Richards and Kendall 2002)
Xenopus laevis	Mort	NF 46	4	LC50	564	196-1620	F	S	U	4	3	5	3	3.75	Q	FW	(Richards 2000)
Xenopus laevis (LSS)	Mort	Embryo	4	LC50	2410	2135-2722	A	R	U	2	1	5	3	2.75	N	FW	(El-Merhibi et al. 2004)
Xenopus laevis (LSS)	Mort	NF 14	4	LC50	14600	10800-19700	F	S	U	4	3	5	3	3.75	Q	FW	(Richards and Kendall 2002)
Xenopus laevis (LSS)	Mort	NF 10-14	4	LC50	14600	10800-19700	F	S	U	4	3	5	3	3.75	Q	FW	(Richards 2000)
Crustacea																	
Americamysis bahia	Mort	<24 h	4	LC50	0.035	0.029-0.043	A	F	M	2	1	5	3	2.75	N	SW	(Schimmel et al. 1983)
Amphiascus tenuiremis	Mort	Adu male	4	LC50	0.61	0.12-1.27	A	S	M	4	3	5	3	3.75	Q	SW	(Bejarano et al. 2005)
Amphiascus tenuiremis	Mort	Adu female	4	LC50	3.56	2.23-5.16	A	S	M	4	3	5	3	3.75	Q	SW	(Bejarano et al. 2005)
Amphiascus tenuiremis	Mort	Adu male	4	LC50	3.6	2.7-4.64	A	S	M	4	3	5	3	3.75	Q	SW + DOM [b]	(Bejarano et al. 2005)
Amphiascus tenuiremis	Mort	Adu female	4	LC50	8.37	6.58-10.79	A	S	M	4	3	5	3	3.75	Q	SW + DOM [b]	(Bejarano et al. 2005)
Artemia franciscana	Mort	Naup	1	LC50	>18000		F	S	U	2	2	5	2	2.75	N	SW	(Varo et al. 1998)

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Artemia franciscana	Mort	Naup	1	LC50	>18000		F	S	U	2	2	5	2	2.75	N	SW	(Varo et al. 1998)
Artemia franciscana	Mort	Naup	1	LC50	>18000		F	S	U	2	2	5	2	2.75	N	SW	(Varo et al. 1998)
Artemia parthenogenetica	Mort	Adu	1	LC50	80	+-0.01	F	S	M	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Artemia parthenogenetica	Mort	Juv	1	LC50	3900	+-0.9	F	S	M	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Artemia parthenogenetica	Mort	Naup	1	LC50	>18000		F	S	M	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Artemia salina	Mort	Naup	1	LC50	30	10-40	F	NR	U	3	1	5	3	3	Q	SW	(Sanchez-Fortun et al. 1996)
Artemia salina	Mort	Naup	1	LC50	160	110-230	F	NR	U	3	1	5	3	3	Q	SW	(Sanchez-Fortun et al. 1996)
Artemia salina	Mort	Naup	1	LC50	385	225-545	A	S	U	3	1	5	3	3	Q	SW	(Rao et al. 2007)
Artemia salina	Mort	Naup	1	LC50	1080	780-1510	F	NR	U	3	1	5	3	3	Q	SW	(Sanchez-Fortun et al. 1996)
Artemia salina	Mort	Naup	1	LC50	3190	1350-6340	F	S	U	2	1	5	3	2.75	N	SW	(Varo et al. 2002)
Artemia sp.	Mort	Naup	1	EC50	1900	NA	A	S	M	2	1	5	2	2.5	N	SW	(Guzzella et al. 1997)
Artemia sp.	Mort	Naup	1	EC50	2000	NA	A	S	M	2	1	5	2	2.5	N	SW	(Guzzella et al. 1997)
Artemia sp.	Mort	Naup	1	EC50	2000	NA	A	S	M	2	1	5	2	2.5	N	SW	(Guzzella et al. 1997)
Asellus aquaticus	Mort	Adult	1	LC50	>7	NC	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Asellus aquaticus	Mort	Adult	3	LC50	7.64	6.53–8.93)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Asellus aquaticus	Mort	Adult	4	LC50	8.58	4.63–15.9)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Ceriodaphnia dubia	Mort	<24 h	1	LC50	0.063	0.056 - 0.072	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	1	LC50	0.086	0.074-0.101	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	1	LC50	0.095	0.083-0.109	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	1	LC50	0.101	0.079-0.130	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	1	LC50	>0.133	NA	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	1	EC50	0.17	0.14-0.19	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Ceriodaphnia dubia	Mort	<24 h	1	LC50	>0.174	NA	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.05	0.048-0.053	A	S	M	2	1	5	3	2.75	N	FW	(El-Merhibi et al. 2004)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.056	0.054-0.059	A	S	M	4	2	5	3	3.5	Q	FW	(Harmon et al. 2003)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.058	0.027-0.124	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.064	0.055-0.073	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.066	0.055-0.078	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.079	0.073-0.086	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.094	0.066-0.133	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	2	LC50	0.117	0.107-0.127	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	3	LC50	0.058	0.027-0.124	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	3	LC50	0.068	0.056-0.080	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	3	LC50	0.078	0.043-0.143	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	3	LC50	0.107	0.091-0.123	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	4	LC50	0.053	0.040-0.071	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Ceriodaphnia dubia	Mort	<24 h	4	LC50	0.055	0.049-0.061	A	S	M	3	2	5	3	3.25	Q	FW	(Bailey et al. 1997)
Daphnia ambigua	Mort	<24 h	2	LC50	0.035	0.032-0.037	A	S	M	4	2	5	3	3.5	Q	FW	(Harmon et al. 2003)
Daphnia carinata	Mort	<24 h	1	EC50	0.13	0.12-0.13	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Daphnia carinata	Mort	<24 h	2	EC50	0.09	0.08-0.09	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Daphnia carinata	Mort	<24 h	2	LC50	0.235	0.203-0.267	F	S	U	4	2	5	3	3.5	Q	FW	(Zalizniak and Nugegoda 2006)

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Daphnia carinata	Mort	<24 h	2	LC50	0.24	0.24-0.24	A	S	U	4	2	5	2	3.25	Q	FW	(Caceres et al. 2007)
Daphnia carinata	Mort	<24 h	2	LC50	0.28	0.234-0.326	F	S	U	4	2	5	3	3.5	Q	FW	(Zalizniak and Nugegoda 2006)
Daphnia carinata	Mort	<24 h	2	LC50	0.3	0.14-0.0.46	A	S	U	4	2	5	2	3.25	Q	FW	(Caceres et al. 2007)
Daphnia carinata	Mort	<24 h	2	LC50	0.512	0.450-0.574	F	S	U	4	2	5	3	3.5	Q	FW	(Zalizniak and Nugegoda 2006)
Daphnia longispina	Mort	(sub)Adult	2	LC50	0.8	0.6-1.0	A	S	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Daphnia longispina	Mort	(sub)Adult	4	LC50	0.3	NA	A	R	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Daphnia magna	Mort	Adult	1	LC50	889	0.005–1.7E8)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Daphnia magna	Mort	<24 h	1	LC50	3.7	2.5-5.9	A	S	M	4	2	5	3	3.5	Q	FW	(Kersting and Wijngaarden 1992)
Daphnia magna	Mort	Adult	2	LC50	27.43	0.66–1145)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Daphnia magna	Mort	<24 h	2	LC50	0.6	0.52 - 0.68	A	S	M	4	2	5	3	3.5	Q	FW	(Moore et al. 1998)
Daphnia magna	Mort	<24 h	2	LC50	0.74	0.69-0.79	A	S	M	3	1	5	3	3	Q	FW	(Palma et al. 2008)
Daphnia magna	Mort	<24 h	2	LC50	1	1.0-1.1	A	S	M	4	2	5	3	3.5	Q	FW	(Kersting and Wijngaarden 1992)
Daphnia magna	Mort	<24 h	2	LC50	344	343-345	A	NR	M	2	2	5	3	3	Q	FW	(Guilhermino et al. 2000)
Daphnia magna	Mort	Adult	3	LC50	4.37	0.87–21.96)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Daphnia magna	Mort	Adult	4	LC50	0.82	0.44–1.51)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Daphnia pulex	ABND	<24 h	2	EC50	0.3		A	R	M	3	2	5	3	3.25	Q	FW	(van der Hoeven and Gerritsen 1997)
Daphnia pulex	Mort	<24 h	3	LC50	0.12		A	R	M	3	2	5	3	3.25	Q	FW	(van der Hoeven and Gerritsen 1997)
Daphnia pulex	Mort	8 d	3	LC50	0.35		A	R	M	3	2	5	3	3.25	Q	FW	(van der Hoeven and Gerritsen 1997)
Daphnia pulex	Mort	8 d	3	LC50	>0.8		A	R	M	3	2	5	3	3.25	Q	SW	(van der Hoeven and Gerritsen 1997)
Eriocheir sinensis	Mort	Juv 1	1	LC50	100	NA	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Adu	1	LC50	461	316-100544	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Juv 2	3	LC50	100	NA	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Adu	3	LC50	200	NA	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Juv 1	4	LC50	23	17.4-27.5	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Juv 1	4	LC50	24	16-7-30.2	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Emb	4	LC50	28	6.2-61.4	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Emb	4	LC50	55	7.4-109.0	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Juv 2	4	LC50	76	60.3-94.2	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Juv2	4	LC50	79	64.1-95.7	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Adu	4	LC50	142	122.0-162.6	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Eriocheir sinensis	Mort	Adu	4	LC50	144	130.2-162.6	F	R	U	3	1	5	3	3	Q	SW	(Li et al. 2006)
Gammarus fossarum	Mort	15-20 mg	4	LC50	2.9	2.70-3.15	A	R	M	4	3	4	3	3.5	Q	FW	(Xuereb et al. 2009)
Gammarus lacustris	Mort	Unknown	4	LC50	0.11	NR	F	S	NR						Q	FW	(Mayer and Ellersieck 1986)
Gammarus palustris	Mort	Unknown	2	LC50	5.2	3.3-8.23	A	S	U	3	2	5	3	3.25	Q	SW	(Leight and Dolah 1999)
Gammarus palustris	Mort	Unknown	2	LC50	6.5	4.33-8.78	A	R	U	3	2	5	3	3.25	Q	SW	(Leight and Dolah 1999)
Gammarus palustris	Mort	Unknown	3	LC50	0.6	0.41-0.89	A	R	U	3	2	5	3	3.25	Q	SW	(Leight and Dolah 1999)
Gammarus palustris	Mort	Unknown	3	LC50	1.0	0.57-1.84	A	S	U	3	2	5	3	3.25	Q	SW	(Leight and Dolah 1999)

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Gammarus palustris	Mort	Unknown	4	LC50	0.19	0.15-0.24	A	R	U	3	2	5	3	3.25	Q	SW	(Leight and Dolah 1999)
Gammarus *palustris*	Mort	Unknown	4	LC50	0.3	0.12-0.79	A	S	U	3	2	5	3	3.25	Q	SW	(Leight and Dolah 1999)
Gammarus pulex	Mort	Adult	1	LC50	3.1	0.06–158)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Gammarus pulex	Mort	Adult	2	LC50	0.43	0.21–0.87)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Gammarus pulex	Mort	6.5-17 mm	2	LC50	0.08	0.05-0.14	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Gammarus pulex	Mort	Adult	3	LC50	0.23	0.18–0.29)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Gammarus pulex	Mort	Adult	4	LC50	0.23	0.2–0.25)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Gammarus pulex	Mort	6.5-17 mm	4	LC50	0.07	0.04-0.11	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Hyalella azteca	Mort	2-3 wk	2	LC50	0.1	0.06-0.14	A	S	M	4	2	5	3	3.5	Q	FW	(Moore et al. 1998)
Hyalella azteca	Mort	7-14 d	4	LC50	0.04	0.03-0.05	A	F	M	3	1	4	3	2.75	N	FW	(Ankley and Collyard 1995)
Litopenaeus stylirostris	Mort	Larva	2	LC50	2266	NA	F	NR	U	2	1	5	2	2.5	N	SW	(Reyes et al. 2002)
Litopenaeus vannamei	Mort	Juv	2	LC50	4.8	NA	F	S	U	2	1	5	2	2.5	N	SW	(Galindo et al. 1996.)
Macrobrachium rosenbergii	Mort	9-10mm	1	LC50	0.7	06-0.8	F	S	M	3	3	5	3	3.5	Q	FW	(Satapornvanit et al. 2009)
Macrobrachium rosenbergii	Mort	9-10mm	2	LC50	0.3	0.1-0.6	F	S	M	3	3	5	3	3.5	Q	FW	(Satapornvanit et al. 2009)
Maja squinado	SURV	Zoea 1	1	LC50	0.84	0.56-1.25	A	S	U	2	1	5	3	2.75	N	SW	(Bellas et al. 2005)
Maja squinado	SURV	Zoea 1	2	LC50	0.79	0.52=1.19	A	S	U	2	1	5	3	2.75	N	SW	(Bellas et al. 2005)
Moina australiensis	Mort	<24 h	1	EC50	0.16	0.13-0.20	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Moina australiensis	Mort	<24 h	2	EC50	0.1	0.08-0.12	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Neocaridina denticulata	Mort	Adult	1	LC50	1103	540–2256)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Neocaridina denticulata	Mort	Adult	2	LC50	660	453–960)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Neocaridina denticulata	Mort	Adult	3	LC50	477	342–667)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Neocaridina denticulata	Mort	Adult	4	LC50	457	317–658)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Neomysis integer	Mort	Adu	4	LC50	0.13	0.11-0.16	F	F	NR	2	2	5	3	3	Q	SW	(Roast et al. 1999)
Neomysis integer	Mort	Adu	4	LC50	0.15	0.08-0.31	F	R	NR	2	2	5	3	3	Q	SW	(Roast et al. 1999)
Neomysis integer	Mort	<24 h	4	LC50	0.19	0.16-0.23	F	F	NR	2	2	5	3	3	Q	SW	(Roast et al. 1999)
Orconectes immunis	Mort	Adu	4	LC50	6	4-9	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Palaemon serratus	SURV	Zoea 1	1	LC50	0.35	0.27-0.46	A	S	U	2	1	5	3	2.75	N	SW	(Bellas et al. 2005)
Palaemon serratus	SURV	Zoea 1	2	LC50	0.22	0.16-0.29	A	S	U	2	1	5	3	2.75	N	SW	(Bellas et al. 2005)
Palaemonetes argentinus	Mort	Juv	4	LC50	0.49	0.235-0.745	F	NR	U	2	1	5	2	2.5	N	FW	(Montagna and Collins 2007)
Palaemonetes pugio	Mort	<24 h	4	LC50	0.15	0.13-018	A	R	U	3	1	5	3	3	Q	FW	(Key and Fulton 2006)
Palaemonetes pugio	Mort	Post larv	4	LC50	0.15	0.11-0.18	A	R	U	3	1	5	3	3	Q	FW	(Key and Fulton 2006)
Paramelita nigroculus	Mort	Unknown	1	LC50	0.9	0.3-1.6	F	S	U	2	2	5	2	2.75	N	FW	(Schulz 2001)
Parathelphusidae	Mort	Adult	1	LC50	194	163-230	F	NR	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007b)
Parathelphusidae	Mort	Adult	2	LC50	169	142-200	F	NR	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007b)
Parathelphusidae	Mort	Adult	3	LC50	154	127-246	F	NR	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007b)
Parathelphusidae	Mort	Adult	4	LC50	120	81-249	F	NR	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007b)
Paratya australiensis	Mort	Juv	1	EC50	1.92	1.32-2.78	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Paratya australiensis	Mort	Juv	2	EC50	0.72	0.59-0.86	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Paratya australiensis	Mort	Unknown	3	LC50	0.1		F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	3	LC50	0.35		F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	3	LC50	0.2		F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure µg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Paratya australiensis	Mort	Juv	3	EC50	0.41	0.35-0.48	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Paratya australiensis	Mort	Unknown	4	LC50	0.063	0.052-0.072	F	R	U	3	3	5	3	3.5	Q	FW	(Kumar et al. 2010)
Paratya australiensis	Mort	Unknown	4	LC50	0.08	0.07-0.09	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.08	0.07-0.09	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.1	0.08-0.13	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.15	0.13-0.16	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.15	0.12-0.18	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.25	0.2-0.29	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.28	0.26-0.31	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.28	0.25-0.32	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Unknown	4	LC50	0.14	0.13-0.16	F	R	U	4	3	5	3	3.75	Q	FW	(Olima et al. 1997)
Paratya australiensis	Mort	Juv	4	EC50	0.33	0.29-0.39	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Procambarus clarkii	Mort	15-30 g	1	LC50	37	33-46	F	F	U	2	1	5	3	2.75	N	FW	(Cebrian et al. 1992)
Procambarus clarkii	Mort	15-30 g	2	LC50	23	22-24	F	F	U	2	1	5	3	2.75	N	FW	(Cebrian et al. 1992)
Procambarus clarkii	Mort	15-30 g	3	LC50	22	21-23	F	F	U	2	1	5	3	2.75	N	FW	(Cebrian et al. 1992)
Procambarus clarkii	Mort	15-30 g	4	LC50	21	20-22	F	F	U	2	1	5	3	2.75	N	FW	(Cebrian et al. 1992)
Procambarus sp(LSS)	Mort	Juv	1	LC50	45	27.33–73.12)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp	Mort	Adult	1	LC50	4	2.44–6.74)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp(LSS)	Mort	Juv	2	LC50	35	24.48–49.5)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp	Mort	Adult	2	LC50	3	1.78–4.25)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp(LSS)	Mort	Juv	3	LC50	14	9.61–19.9)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp	Mort	Adult	3	LC50	2	??	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp(LSS)	Mort	Juv	4	LC50	13	9.13–18.2)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procambarus sp	Mort	Adult	4	LC50	1.55	0.78–3.06)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Simocephalus vetulus	Mort	<24 h	1	EC50	0.15	0.13-0.17	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Simocephalus vetulus	Mort	<24 h	2	EC50	0.09	0.08-0.10	A	S	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Simocephalus vetulus	Mort	Juv-Adult	2	LC50	0.8	0.7-0.9	A	S	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Simocephalus vetulus	Mort	Juv-Adult	4	LC50	0.5	0.4-0.6	A	R	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Spiralothelphusa hydrodroma	Mort	Adult	1	LC50	194	163-230	F	R	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007a)
Spiralothelphusa hydrodroma	Mort	Adult	2	LC50	154	127-246	F	R	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007a)
Spiralothelphusa hydrodroma	Mort	Adult	2	LC50	169	142-200	F	R	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007a)
Spiralothelphusa hydrodroma	Mort	Adult	4	LC50	120	81-249	F	R	U	1	1	5	3	2.5	N	FW	(SenthilKumaar et al. 2007a)
Streptocephalus sudanicus	Mort	Unknown	1	EC50	8.25	NA	A	S	U	2	1	5	3	2.75	N	FW	(Lahr et al. 2001)
Streptocephalus sudanicus	Mort	Unknown	2	EC50	3.48	NA	F	S	U	2	1	5	3	2.75	N	FW	(Lahr et al. 2001)
Thamnocephalus platyurus	Mort	<24 h	1	LC50	0.53	0.26-0.79	F	S	U	3	1	5	3	3	Q	FW	(Palma et al. 2008)
Trichodactylus borellianus	Mort	Intermolt	1	LC50	242	177.35-307.29	F	S	U	3	1	3	3	2.5	N	FW	(Montagna and Collins 2008)
Triops longicaudatus	Mort	4-5 d	1	LC50	4	1.7-4.9	F	S	U	3	1	5	2	2.75	N	FW	(Walton et al. 1990)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure µg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Fish																	
Aphanius iberus	Mort	Adult	2	LC50	39	+-7.2	F	R	NR	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Aphanius iberus	Mort	Adult	3	LC50	18	+-0.02	F	R	M	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Atherinops affinis	Mort	7 d	4	LC50	4.5	3.4-5.9	F	S	U	3	2	5	3	3.25	Q	SW	(Hemmer et al. 1992)
Atherinops affinis	Mort	28 d	4	LC50	5.5	5-6	F	S	U	3	2	5	3	3.25	Q	SW	(Hemmer et al. 1992)
Bidyanus bidyanus NB: LC50 not from the reviewed study; from Patra, 1999 (Thesis)	Mort	Unknown	4	LC50	17	5.0-29.0	A	R	U	3	2	1	3	2.25	N	FW	(Patra et al. 2007)
Carassius auratus	Mort	Unknown	4	LC50	>806	NA	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Channa punctata	Mort	26-30 g	4	LC50	365	NA	F	R	U	2	1	5	2	2.5	N	FW	(Jaroli and Sharma 2005)
Chanos chanos	Mort	Fry	3	LC50	10	NA	F	S	U	3	1	5	2	2.75	N	SW	(Tsai 1978)
Chanos chanos	Mort	Fingerling	3	LC50	150	NA	F	S	U	3	1	5	2	2.75	N	SW	(Tsai 1978)
Cirrhinus mrigala	Mort	Juv	4	LC50	550	NA	A	F	U	2	2	5	2	2.75	N	FW	(Tilak et al. 2004)
Cirrhinus mrigala	Mort	Juv	4	LC50	650	NA	A	S	U	2	2	5	2	2.75	N	FW	(Tilak et al. 2004)
Cyprinodon variegatus	Mort	Unknown	4	LC50	136	113-153	A	F	M	2	1	5	3	2.75	N	SW	(Schimmel et al. 1983)
Cyprinus carpio	Mort	Fry	4	LC50	8	2.0-16.0	F	S	U	3	1	5	3	3	Q	FW	(De Mel and Pathiratne 2005)
Fundulus heteroclitus	Mort	5.5cm, 1.7g	4	LC50*	4.65	3.45-6.28	F	S	U	3	1	5	3	3	Q	SW	(Thirugnanam and Forgash 1977)
Fundulus similis	Mort	Unknown	4	LC50	4.1	2.8-6.9	A	F	M	2	1	5	3	2.75	N	SW	(Schimmel et al. 1983)
Gambusia affinis	Mort	Unknown	1	LC50	110	NA	F	S	U	2	1	5	2	2.5	N	FW	(Milam et al. 2000)
Gambusia affinis	Mort	20-45 mm	1	LC50	4000	NA	F	S	U	3	1	4	4	3	Q	FW	(Hansen et al. 1972)
Gambusia affinis	Mort	Adult F	2	LC50	150	NA	F	F	U	2	1	5	2	2.5	N	FW	(Boone and Chambers 1996)
Gambusia affinis	Mort	Unknown	2	LC50	450	NA	F	S	U	2	1	5	2	2.5	N	FW	(Milam et al. 2000)
Gambusia affinis	Mort	Adult\	2	LC50	520	+-60	F	R	NR	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Gambusia affinis	Mort	>25 mm	2	LC50	1018	NA	A	NR	U	2	1	4	2	2.25	N	FW	(Culley and Ferguson 1969)
Gambusia affinis	Mort	>25 mm	2	LC50	1291	NA	A	NR	U	2	1	4	2	2.25	N	FW	(Culley and Ferguson 1969)
Gambusia affinis	Mort	Adult	3	LC50	540	+-50	F	R	M	3	3	6	3	3.75	Q	SW	(Varo et al. 2000)
Gambusia affinis	Mort	125 mg	4	LC50	298	255.06-340.21	A	R	U	3	1	5	3	3	Q	FW	(Rao et al. 2005)
Gambusia affinis	Mort	Adult	4	LC50	520	+-50	F	R	M	3	3	5	3	3.5	Q	SW	(Varo et al. 2000)
Gambusia yucatana	Mort	Unknown	4	LC10	6	2-9	F	S	U	2	1	5	3	2.75	N	FW	(Rendon-von Osten et al. 2005)
Gambusia yucatana	Mort	Unknown	4	LC50	11	8-17	F	S	U	2	1	5	3	2.75	N	FW	(Rendon-von Osten et al. 2005)
Gasterosteus aculeatus	Mort	1-2 years	2	LC50	13.4	9.0-19.9	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Gasterosteus aculeatus	Mort	1-2 years	4	LC50	8.5	6.2-11.9	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Gibelion catla	Mort	Juv	4	LC50	300	NA	A	F	U	2	2	5	2	2.75	N	FW	(Tilak et al. 2004)
Gibelion catla	Mort	Juv	4	LC50	350	NA	A	S	U	2	2	5	2	2.75	N	FW	(Tilak et al. 2004)
Heteropneustes fossilis	Mort	Unknown	4	LC50	2500	NA	A	NR	U	1	1	4	2	2	N	FW	(Singh et al. 2008)
Ictalurus punctatus	Mort	7.9 g	3	LC50	806	434-1088	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Ictalurus punctatus	Mort	Unknown	4	LC50	806	434-1088	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Ictalurus punctatus	Mort	Juv	4	LC50	2077	452 SEM)	F	NR	U	1	1	4	3	2.25	N	FW	(Dalvi and Davis 1998)
Labeo rohita	Mort	Juv	4	LC50	300	NA	A	F	U	2	2	5	2	2.75	N	FW	(Tilak et al. 2004)
Labeo rohita	Mort	Juv	4	LC50	470	NA	A	S	U	2	2	5	2	2.75	N	FW	(Tilak et al. 2004)
Lepomis cyanellus	Mort		2	LC50	50		F	S	U						N	FW	(Davey et al. 1976)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure µg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Lepomis cyanellus	Mort		3	LC50	40		F	S	U						N	FW	(Davey et al. 1976)
Lepomis macrochirus	Mort		4	EC50	1.78	1.46–2.17	A	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Lepomis macrochirus	Mort	Unknown	4	LC50	10	6-14	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Leuciscus idus	Mort	NA	4	LC50	10	7.4-14	A	R	U	4	2	5	5	4	Y	FW	(Douglas and Pell 1985b)
Leuresthes tenuis	Mort	14 d	4	LC50	0.9	0.5-2.5	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	7 d	4	LC50	1	0.8-1.3	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	7 d	4	LC50	1	0.8-1.3	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	7 d	4	LC50	1	0-1.9	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	14 d	4	LC50	1	0.8-1.4	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	0 d	4	LC50	1	0.8-1.3	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	0 d	4	LC50	1	0.8-1.3	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	0 d	4	LC50	1.2	0.5-2.2	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	28 d	4	LC50	1.3	1.0-1.7	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	28 d	4	LC50	1.3	1.0-1.7	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	28 d	4	LC50	1.6	1.7 - oo	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	14 d	4	LC50	1.7	0-6.0	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	14 d	4	LC50	1.8	1.2-2.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	14 d	4	LC50	1.8	0.9-2.8	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	28 d	4	LC50	2.4	1.00- oo	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	28 d	4	LC50	2.6	2.0-3.7	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis	Mort	28 d	4	LC50	2.6	2.0-3.7	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis(LSS)	Mort	7 d	4	LC50	2.7	2.0-3.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis(LSS)	Mort	7 d	4	LC50	2.7	1.9-3.6	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis(LSS)	Mort	7 d	4	LC50	2.8	1.2-5.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis(LSS)	Mort	0 d	4	LC50	5.5	1.5-11.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis(LSS)	Mort	0 d	4	LC50	6	2.7-11.1	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Leuresthes tenuis(LSS)	Mort	0 d	4	LC50	6.7	0-18.3	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Melanotaenia fluviatilis	Mort	Fry	1	LC50	407	334-496	F	R	U	3	3	5	3	3.5	Q	FW	(Kumar et al. 2010)
Melanotaenia fluviatilis	Mort	Fry	2	LC50	244	184-325	F	R	U	3	3	5	3	3.5	Q	FW	(Kumar et al. 2010)
Melanotaenia fluviatilis	Mort	Fry	3	LC50	169	121-237	F	R	U	3	3	5	3	3.5	Q	FW	(Kumar et al. 2010)
Melanotaenia fluviatilis	Mort	Fry	4	LC50	122	86-174	F	R	U	3	3	5	3	3.5	Q	FW	(Kumar et al. 2010)
Menidia beryllina	Mort	Juv	4	LC50	4.2	3.4-5.4	A	F	M	3	3	5	3	3.5	Q	SW	(Clark et al. 1985)
Menidia beryllina	Mort	Juv	4	LC50	10.2	9.0-11.6	F	S	U	3	2	5	3	3.25	Q	SW	(Hemmer et al. 1992)
Menidia menidia	Mort	0 d	4	LC50	0.5	0.4-0.7	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia	Mort	0 d	4	LC50	0.5	0.4-0.6	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia	Mort	0 d	4	LC50	0.6	0.2-1.1	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	7 d	4	LC50	1	0.9-1.2	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	7 d	4	LC50	1	0.9-1.2	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	7 d	4	LC50	1	0.7-1.4	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	14 d	4	LC50	1.1	0 - oo	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	14 d	4	LC50	1.1	1.0-1.3	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	Juv	4	LC50	1.7	1.4-2.0	A	F	M	2	1	5	3	2.75	N	SW	(Schimmel et al. 1983)
Menidia menidia(LSS)	Mort	14 d	4	LC50	2.3	1.8-2.9	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	14 d	4	LC50	2.4	1.9-2.9	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	14 d	4	LC50	2.6	2.1-3.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	7 d	4	LC50	2.8	2.3-3.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure μg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Menidia menidia(LSS)	Mort	7 d	4	LC50	2.8	2.3-3.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	7 d	4	LC50	2.8	2.0-5.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	28 d	4	LC50	3	2.6-4.0	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	28 d	4	LC50	3.1	2.7-3.7	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	28 d	4	LC50	3.1	2.0-4.2	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	28 d	4	LC50	4	3.2-5.1	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	28 d	4	LC50	4.1	3.3-5.2	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	0 d	4	LC50	4.4	3.7-5.4	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	0 d	4	LC50	4.5	3.6-5.7	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	28 d	4	LC50	4.5	2.4-6.7	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia menidia(LSS)	Mort	0 d	4	LC50	5.6	1.7-10.0	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	14 d	4	LC50	0.4	0.3-0.6	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	14 d	4	LC50	0.4	0.3-0.5	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	14 d	4	LC50	0.4	0.2-0.9	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	7 d	4	LC50	0.5	0.5-0.6	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	7 d	4	LC50	0.5	0.5-0.6	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	7 d	4	LC50	0.5	0.4-0.7	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	28 d	4	LC50	0.9	0.7-1.1	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	28 d	4	LC50	0.9	0.7-1.1	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	28 d	4	LC50	1	0.7-1.6	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	0 d	4	LC50	1	0 - oo	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	0 d	4	LC50	1	0.8-1.3	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	0 d	4	LC50	1.1	0.3-2.5	F	F	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	Juv	4	LC50	1.3	1.0-1.7	A	F	M	3	3	5	3	3.5	Q	SW	(Clark et al. 1985)
Menidia peninsulae	Mort	14 d	4	LC50	1.8	1.5-2.2	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	14 d	4	LC50	1.8	1.4-2.3	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	14 d	4	LC50	1.8	1.3-3.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	7 d	4	LC50	1.8	0.8-oo	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	7 d	4	LC50	2	1.5-2.8	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	7 d	4	LC50	2	1.5-2.7	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	28 d	4	LC50	3.9	3.1-5.8	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	0 d	4	LC50	3.9	1.9-9.0	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	28 d	4	LC50	4	3.4-5.1	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	28 d	4	LC50	4	3.0 - oo	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	0 d	4	LC50	4.2	3.3-5.5	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Menidia peninsulae	Mort	0 d	4	LC50	4.2	3.2-5.1	F	S	NR	4	2	5	3	3.5	Q	SW	(Borthwick et al. 1985)
Mugil cephalus	Mort	Unknown	4	LC50	5.4	4.0-6.9	A	F	M	2	1	5	3	2.75	N	SW	(Schimmel et al. 1983)
Oncorhynchus clarki	Mort	NR	4	LC50	5.4		F	S	NR						Q	FW	(Mayer and Ellersieck 1986)
Oncorhynchus clarki	Mort	NR	4	LC50	13.4		F	S	NR						Q	FW	(Mayer and Ellersieck 1986)
Oncorhynchus clarki	Mort	NR	4	LC50	18.4		F	S	NR						Q	FW	(Mayer and Ellersieck 1986)
Oncorhynchus mykiss	Mort	Juv	4	LC50	8	6.8-9.4	A	F	M	3	3	5	3	3.5	Q	FW	(Holcombe et al. 1982)
Oncorhynchus mykiss	Mort	Juv	4	LC50	9	7-11	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Opsanus beta	Mort	Juv	4	LC50	520	450-600	A	R	M	3	3	5	2	3.25	Q	SW	(Hansen et al. 1986)
Oreochromis mossambicus	Mort	3 g	4	LC50	26	19.7-32.0	F	R	U	2	1	5	3	2.75	N	FW	(Rao et al. 2003)
Oryzias latipes	Mort	30 d	1	LC50	300	280-330	A	S	M	4	3	5	3	3.75	Q	FW	(Rice et al. 1997)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure µg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Oryzias latipes	Mort	Unknown	1	LC50	310	NA	F	S	U	2	1	5	2	2.5	N	FW	(Shim and Self 1973)
Oryzias latipes	Mort	30 d	2	LC50	250	230-270	A	R	M	4	3	5	3	3.75	Q	FW	(Rice et al. 1997)
Oryzias latipes	Mort	24 d	2	LC50	300	NA	A	S	M	2	2	5	2	2.75	N	FW	(Carlson et al. 1998)
Pimephales promelas	Mort	31-32 d	1	LC50	320	285-360	A	F	M	3	3	5	3	3.5	Q	FW	(Holcombe et al. 1982)
Pimephales promelas	Mort	<24 h	2	EC50	149	134.4–164.4	A	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Pimephales promelas	Mort	<24 h	2	LC50	163	149.0-175.4	A	S	M	4	2	5	3	3.5	Q	FW	(Moore et al. 1998)
Pimephales promelas	Mort	31-32 d	2	LC50	248	225-273	A	F	M	3	3	5	3	3.5	Q	FW	(Holcombe et al. 1982)
Pimephales promelas	Mort	31-32 d	3	LC50	220	204-236	A	F	M	3	3	5	3	3.5	Q	FW	(Holcombe et al. 1982)
Pimephales promelas	Mort	<24 h	4	LC50	120	110-130	A	F	M	3	3	5	3	3.5	Q	FW	(Jarvinen and Tanner 1982)
Pimephales promelas	Mort	<24 h	4	LC50	122	77.0-167.4	A	S	M	4	3	5	3	3.75	Q	FW	(Jarvinen et al. 1988)
Pimephales promelas	Mort	<24 h	4	LC50	130	0-oo	A	S	M	3	3	5	3	3.5	Q	FW	(Jarvinen and Tanner 1982)
Pimephales promelas	Mort	<24 h	4	EC50	131	117.6–146.4	A	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Pimephales promelas	Mort	~80 d	4	EC50	134	115.4–155.4	A	R	M	3	2	5	3	3.25	Q	FW	(Wacksman et al. 2006)
Pimephales promelas	Mort	<24 h	4	LC50	140	120-160	A	F	M	3	3	5	3	3.5	Q	FW	(Jarvinen et al. 1988)
Pimephales promelas	Mort	<24 h	4	LC50	170	0-oo	A	S	M	3	3	5	3	3.5	Q	FW	(Jarvinen and Tanner 1982)
Pimephales promelas	Mort	31-32 d	4	LC50	203	191-217	A	F	M	3	3	5	3	3.5	Q	FW	(Holcombe et al. 1982)
Pimephales promelas	Mort	Unknown	4	LC50	542	225-1310	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Poecilia reticulata	GFDB	3-3.8 cm	1	EC50	30	NA	F	S	U	2	1	5	2	2.5	N	FW	(Rongsriyam et al. 1968)
Poecilia reticulata	Mort	3-3.8 cm	1	LC50	220	NA	F	S	U	2	1	5	2	2.5	N	FW	(Rongsriyam et al. 1968)
Poecilia reticulata	Mort	48 h	4	LC50	7.2	NA	A	NR	U	2	1	5	4	3	Q	FW	(De Silva and Samayawardhena 2002)
Poecilia reticulata	Mort	48 h	4	LC50	7.2	NA	F	R	U	3	1	5	3	3	Q	FW	(De Silva and Samayawardhena 2002)
Pungitius pungitius	Mort	Adult	2	LC50	5.7	4.4-7.5	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Pungitius pungitius	Mort	Adult	4	LC50	4.7	3.6-6.0	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Rutilus rutilus	Mort	NA	4	LC50	250	170-360	A	R	U	4	2	5	5	4	Y	FW	(Douglas and Pell 1985a)
Salvelinus namaycush	Mort		4	LC50	73		F	S	NR						Q*	FW	(Mayer and Ellersieck 1986)
Salvelinus namaycush	Mort		4	LC50	98		F	S	NR						Q*	FW	(Mayer and Ellersieck 1986)
Salvelinus namaycush	Mort		4	LC50	140		F	S	NR						Q*	FW	(Mayer and Ellersieck 1986)
Salvelinus namaycush	Mort		4	LC50	205		F	S	NR						Q*	FW	(Mayer and Ellersieck 1986)
Salvelinus namaycush	Mort		4	LC50	227		F	S	NR						Q*	FW	(Mayer and Ellersieck 1986)
Salvelinus namaycush	Mort		4	LC50	244		F	F	NR						Q*	FW	(Mayer and Ellersieck 1986)
Sander vitreus	Mort	Post larv II	2	LC50	12	9-14	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus	Mort	Post larv II	2	LC50	13	10-16	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus	Mort	Post larv I	2	LC50	24	18-29	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	30 d	2	LC50	26	24-28	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus	Mort	Post larv I	2	LC50	29	22-35	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	30 d	2	LC50	37	28-45	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	60 d	2	LC50	41	32-50	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	90 d	2	LC50	43	36-50	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	90 d	2	LC50	45	35-55	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	Pro larv	2	LC50	225	187-263	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Sander vitreus(LSS)	Mort	Pro larv	2	LC50	316	283-348	A	S	M	4	2	5	3	3.5	Q	FW	(Phillips et al. 2002)
Tilapia guineensis	Mort	Juv	4	LC50	2	NA	F	S	U	2	1	4	3	2.5	N	SW	(Chindah et al. 2004)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure µg L^{-1})	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Zacco platypus	Mort	Unknown	1	LC50	1700	NA	F	S	U	2	1	5	2	2.5	N	FW	(Shim and Self 1973)
Insects																	
Aedes aegypti	Mort	4th instar	1	LC50	4	3-4	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	4th instar	1	LC50	6.9	6.19-7.50	F	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	4th instar	1	LC50	7	6-7	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	3rd/4th instar	1	LC50	3.6	NA	F	S	U	3	1	5	2	2.75	N	FW	(Canyon and Hii 1999)
Aedes aegypti	Mort	4th instar	1	LC50	10	10-20	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	Adult	1	LC50	10.3	8.8-11.9	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	3rd/4th instar	1	LC50	12	NA	F	S	U	3	1	5	2	2.75	N	FW	(Canyon and Hii 1999)
Aedes aegypti	Mort	Adult	1	LC50	18.1	13.3-24.0	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	4th instar	1	LC50	20	10-20	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	4th instar	1	LC50	21	18.4-23.9	F	S	U	2	1	5	3	2.75	N	FW	(Rodríguez et al. 2001)
Aedes aegypti	Mort	4th instar	1	LC50	30	20-50	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	4th instar	1	LC50	39	32.1-46.8	F	S	U	2	1	5	3	2.75	N	FW	(Rodríguez et al. 2001)
Aedes aegypti	Mort	4th instar	1	LC50	50	40-60	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	Adult	1	LC50	52	40-52	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	Adult	1	LC50	70	60.1-80.0	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	4th instar	1	LC50	70	60-80	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	Adult	1	LC50	84	74.3-95.6	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	Adult	1	LC50	94	78.8-113.0	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	4th instar	1	LC50	100	90-100	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	4th instar	1	LC50	100	100-200	A	S	U	2	1	5	3	2.75	N	FW	(Rodriguez et al. 2007)
Aedes aegypti	Mort	4th instar	1	LC50	114	103-140	F	S	U	2	1	5	3	2.75	N	FW	(Rodríguez et al. 2001)
Aedes aegypti	Mort	4th instar	1	LC50	150	121-201	F	S	U	2	1	5	3	2.75	N	FW	(Rodríguez et al. 2001)
Aedes aegypti	Mort	Adult	1	LC50	165	152.1-178.8	F	NR	U	3	1	5	3	3	Q	FW	(Tikar et al. 2009)
Aedes aegypti	Mort	4th instar	1	LC50	1100	NA	F	S	U	3	1	5	2	2.75	N	FW	(Cheng et al. 2009)
Aedes albopictus	Mort	4th instar	1	LC50	3.3	1.4-5.2	A	S	NR	3	1	5	3	3	Q	FW	(Ali et al. 1995)
Aedes albopictus	Mort	4th instar	1	LC50	40	40-50	F	S	U	3	1	4	3	2.75	N	FW	(Liu et al. 2004)
Aedes albopictus	Mort	4th instar	1	LC50	400	300-500	F	S	U	3	1	4	3	2.75	N	FW	(Liu et al. 2004)
Aedes albopictus	Mort	4th instar	1	LC50	400	300-500	F	S	U	3	1	4	3	2.75	N	FW	(Liu et al. 2004)
Aedes albopictus	Mort	4th instar	1	LC50	700	500-1000	F	S	U	3	1	4	3	2.75	N	FW	(Liu et al. 2004)
Aedes albopictus	Mort	4th instar	1	LC50	1300	700-2100	F	S	U	3	1	4	3	2.75	N	FW	(Liu et al. 2004)
Aedes albopictus	Mort	4th instar	1	LC50	1400	NA	F	S	U	3	1	5	2	2.75	N	FW	(Cheng et al. 2009)
Anax imperator	Mort	Larva	1	LC50	6.9	(6.34–7.56)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Anax imperator	Mort	Larva	2	LC50	3.3	(2.97–3.66)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Anax imperator	Mort	Larva	3	LC50	2.4	(1.77–3.13)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Anax imperator	Mort	Larva	4	LC50	2.0	(1.5–2.63)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Anisops sardeus	Mort	Unknown	1	LC50	1.6	NA	A	S	U	2	1	5	3	2.75	N	FW	(Lahr et al. 2001)
Anisops sardeus	Mort	Unknown	2	LC50	0.9	NA	F	S	U	2	1	5	3	2.75	N	FW	(Lahr et al. 2001)
Anopheles albimanus	Mort	4th instar	1	LC50	8	NA	F	S	U	2	1	5	2	2.5	N	FW	(Hemingway and Georghiou 1983)
Anopheles quadrimaculatus	Mort	2nd-3rd instar	2	LC50	1	NA	F	S	U	2	1	5	2	2.5	N	FW	(Milam et al. 2000)
Anopheles stephensi	Mort	4th instar	1	LC50	0.2	0.2-0.3	F	S	U	2	1	5	3	2.75	N	FW	(Chitra and Pillai 1984)

Species	Resp.	Test Sub.	Expo (d)	End-point	Measure $\mu g\ L^{-1}$	95% CI	Test item	Expo type	Chem anal	Proced	QA/QC	# conc	Transp.	Stren	Inc.	Media	Ref.
Anopheles stephensi	Mort	4th instar	1	LC50	0.9	0.7-2.0	F	S	U	2	1	5	3	2.75	N	FW	(Chitra and Pillai 1984)
Atalophlebia australis	Mort	Nymph	1	EC50	0.37	0.30-0.44	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Atalophlebia australis	Mort	Nymph	2	EC50	0.28	0.25-0.32	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Atalophlebia australis	Mort	Nymph	3	EC50	0.24	0.20-0.29	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Atalophlebia australis	Mort	Nymph	4	EC50	0.24	0.20-0.29	A	R	U	4	3	5	3	3.75	Q	FW	(Pablo et al. 2008)
Chaoborus obscuripes	Mort	Larva	1	LC50	2.5	(1.38–4.42)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Chaoborus obscuripes	Mort	Larva	2	LC50	1.13	(0.76–1.68)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Chaoborus obscuripes	Mort	Larva	3	LC50	0.61	(0.35–1.08)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Chaoborus obscuripes	Mort	Larva	4	LC50	0.3	(0.13–0.7)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Chaoborus obscuripes	Mort	Larva	4	LC50	6.6	3.0-14.6	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Chironomus crassicaudatus	Mort	4th instar	1	LC50	52	NA	A	S	U	3	1	5	2	2.75	N	FW	(Ali 1981)
Chironomus decorus	Mort	4th instar	1	LC50	45	NA	A	S	U	3	1	5	2	2.75	N	FW	(Ali 1981)
Chironomus dilutus	Mort	4th instar	1	LC50	2120	1103-5125	F	S	U	3	1	5	3	3	Q	FW	(Ha and Choi 2008a)
Chironomus dilutus	Mort	10-13 d	2	LC50	0.3	0.16-0.44	A	S	M	4	2	5	3	3.5	Q	FW	(Moore et al. 1998)
Chironomus dilutus	Mort	4th instar	2	LC50	0.72	0.63-0.85	A	R	M	4	3	5	3	3.75	Q	FW	(Tyler Mehler et al. 2008)
Chironomus dilutus	Mort	4th instar	4	LC50	0.46	0.350-0.537	A	S	M	4	3	5	3	3.75	Q	FW	(Harwood et al. 2009)
Chironomus dilutus	Mort	4th instar	4	LC50	0.83	0.657-1.12	A	S	M	4	3	5	3	3.75	Q	FW	(Harwood et al. 2009)
Chironomus dilutus	Mort	3rd instar	4	LC50	0.47	0.39-0.56	F	S	U	3	1	4	3	2.75	N	FW	(Ankley and Collyard 1995)
Chironomus riparius	Mort	4th instar	1	LC10	668	17-1566	F	S	U	4	1	4	3	3	Q	FW	(Ha and Choi 2008b)
Chironomus riparius	Mort	4th instar	1	LC50	2774	861-5188	F	S	U	4	1	4	3	3	Q	FW	(Ha and Choi 2008b)
Chironomus riparius	Mort	2nd instar	4	LC50	0.09	0.05-0.16	F	NR	U	4	2	5	3	3.5	Q	FW	(Hooftman et al. 1993)
Chironomus riparius	Mort	2nd instar	4	LC50	0.34	0.24-0.48	F	NR	U	4	2	5	3	3.5	Q	FW	(Hooftman et al. 1993)
Chironomus salinarius	Mort	3rd/4th instar	1	LC50	0.99	0.83-1.20	F	S	U	3	1	5	3	3	Q	SW	(Ali et al. 1985)
Chironomus sp.	Mort	Larva	3	LC50	2.6	NA	F	S	U	3	1	5	2	2.75	N	SW	(Tsai 1978)
Chironomus tepperi	Mort	4th instar	1	LC50	1.3	1.2-1.3	F	NR	U	3	1	5	3	3	Q	FW	(Stevens 1992)
Chironomus utahensis	Mort	4th instar	1	LC50	1.2	NA	F	S	U	2	1	5	2	2.5	N	FW	(Ali and Mulla 1977)
Claassenia sabulosa	Mort	Naiad	1	LC50	8.2	4.9-14	F	S	NR	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Claassenia sabulosa	Mort	Naiad	2	LC50	1.8	1.2-2.2	A	S	U	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Claassenia sabulosa	Mort	Naiad	4	LC50	0.57	0.39-0.83	F	S	NR	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Cloeon dipterum	Mort	Larva	1	LC50	1.11	NC	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Cloeon dipterum	Mort	Larva	2	LC50	0.81	(NC)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Cloeon dipterum	Mort	Naiad	2	LC50	1	0.8-1.4	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Cloeon dipterum	Mort	Larva	3	LC50	0.58	(0.450.74)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Cloeon dipterum	Mort	Larva	4	LC50	0.36	(0.29–0.45)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Cloeon dipterum	Mort	Naiad	4	LC50	0.3	0.2-0.3	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Corixa punctata	Mort	Adult	2	LC50	6	4.2-8.5	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Corixa punctata	Mort	Adult	4	LC50	2	1.5-2.6	A	F	M	3	3	5	3	3.5	Q	FW	(van Wijngaarden et al. 1993)
Cricotopus sp.	Mort	4th instar	1	LC50	6.5	NA	F	S	U	2	1	5	2	2.5	N	FW	(Ali and Mulla 1977)
Culex pipiens ssp. fatigans	Mort	Final instar	1	LC50	0.8	NA	F	S	U	2	1	5	2	2.5	N	FW	(Rongsriyam et al. 1968)
Culex quinquefasciatus	Mort	larva	1	LC50	0.009	0.007-0.010	F	S	U	3	1	5	3	3	Q	FW	(Aguilera et al. 1995)
Culex quinquefasciatus	Mort	4th instar	1	LC50	5	4-7	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2005)
Culex quinquefasciatus	Mort	4th instar	1	LC50	6	5-7	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2005)
Culex quinquefasciatus	Mort	4th instar	1	LC50	200	30-700	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2004)

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Culex quinquefasciatus	Mort	4th instar	1	LC50	200	100-200	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2005)
Culex quinquefasciatus	Mort	4th instar	1	LC50	900	600-1200	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2004)
Culex quinquefasciatus	Mort	4th instar	1	LC50	2400	1700-3400	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2005)
Culex quinquefasciatus	Mort	4th instar	1	LC50	4300	3100-6000	F	S	U	2	1	4	3	2.5	N	FW	(Liu et al. 2004)
Culex quinquefasciatus	Mort	4th instar	2	LC50	0.3	NA	A	S	U	2	1	4	2	2.25	N	FW	(Amin and Peiris 1990)
Culex tarsalis	Mort	4th instar	1	LC50	0.38	0.28-0.50	F	S	U	2	1	5	3	2.75	N	FW	(Whyard et al. 1994)
Culex tarsalis	Mort	4th instar	1	LC50	0.38	0.29-0.50	F	S	U	2	1	5	3	2.75	N	FW	(Whyard et al. 1994)
Culex tritaeniorhynchus	Mort	4th instar	1	LC50	0.32	NA	F	S	U	2	1	5	2	2.5	N	FW	(Shim and Self 1973)
Deleatidium sp.	Mort	Nymph	2	LC50	0.05	0.04-0.11	F	S	U	3	1	5	3	3	Q	FW	(Boonthai et al. 2000)
Glyptotendipes paripes	Mort	4th instar	1	LC50	12	NA	A	S	U	3	1	5	2	2.75	N	FW	(Ali 1981)
Goeldichironomus holoprasinus	Mort	4th instar	1	LC50	380	NA	A	S	U	3	1	5	2	2.75	N	FW	(Ali 1981)
Heptageniidae	Mort	Nymph	1	LC50	29	20-37	F	S	U	2	1	3	3	2.25	N	FW	(Siegfried 1993)
Hydrophilus sp.	Mort	Adult	1	LC50	100	44-267	F	S	U	2	1	3	3	2.25	N	FW	(Siegfried 1993)
Hydropsychidae	Mort	larva	1	LC50	30.6	19-46	F	S	U	2	1	3	3	2.25	N	FW	(Siegfried 1993)
Molanna angustata	Mort	Larva	1	LC50	>34.2	NC	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Molanna angustata	Mort	Larva	2	LC50	>34.2		A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Notonecta maculata	Mort	Adult	1	LC50	>16	NC	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Notonecta maculata	Mort	Adult	2	LC50	24	(15–38.2)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Notonecta maculata	Mort	Adult	3	LC50	12	(7.83–17.1)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Notonecta maculata	Mort	Adult	4	LC50	7.97	(5.34–11.9)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Odonata	Mort	Nymph	1	LC50	11	8.6-14.3	F	S	U	2	1	3	3	2.25	N	FW	(Siegfried 1993)
Paraponyx stratiotata	Mort	Larva	1	LC50	55	6.13–496.3)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Paraponyx stratiotata	Mort	Larva	2	LC50	29	(NC)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Paraponyx stratiotata	Mort	Larva	3	LC50	32	(5.57–179)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Paraponyx stratiotata	Mort	Larva	4	LC50	27	(2.9–252)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Peltodytes sp.	Mort	Adult	3	LC50	0.9	NA	F	S	U	3	1	4	2	2.5	N	FW	(Federle and Collins 1976)
Peltodytes sp.	Mort	Adult	4	LC50	0.8	NA	F	S	U	3	1	4	2	2.5	N	FW	(Federle and Collins 1976)
Plea minutissima	Mort	Adult	1	LC50	11.2	(8.95–13.93)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Plea minutissima	Mort	Adult	2	LC50	5.94	(4.026–8.765)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Plea minutissima	Mort	Adult	3	LC50	2.9	(1.92–4.39)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Plea minutissima	Mort	Adult	4	LC50	1.98	(1.32–2.99)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Procladius sp.	Mort	4th instar	1	LC50	0.5	NA	F	S	U	2	1	5	2	2.5	N	FW	(Ali and Mulla 1977)
Procloeon sp.	Mort	Larva	2	LC50	0.081	NA	A	R	M	3	2	4	2	2.75	N	FW	(Anderson et al. 2006)
Pteronarcella badia	Mort	Naiad	1	LC50	4.2	3-6	A	S	U	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Pteronarcella badia	Mort	Naiad	2	LC50	1.8	1.2-2.6	A	S	U	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Pteronarcella badia	Mort	Naiad	4	LC50	0.57	0.39-0.83	A	S	U	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Pteronarcys californica	Mort	Naiad	1	LC50	50	38-65	F	S	NR	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Pteronarcys californica	Mort	Naiad	2	LC50	18	12-26	A	S	U	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Pteronarcys californica	Mort	Naiad	4	LC50	10	7-13	F	S	NR	3	1	4	3	2.75	N	FW	(Sanders and Cope 1968)
Ranatra linearis	Mort	Adult	1	LC50	23	(15.3–33.2)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Ranatra linearis	Mort	Adult	2	LC50	12	(NC)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Ranatra linearis	Mort	Adult	3	LC50	5.0	(3.29–7.68)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Ranatra linearis	Mort	Adult	4	LC50	4.5	(2.39–8.41)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Sialis lutariah	Mort	Larva	1	LC50	>327	NC	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)

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Sialis lutariah	Mort	Larva	2	LC50	>327		A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Sialis lutariah	Mort	Larva	4	LC50	>300	(0.26–1.7E9)	A	S	M	4	4	5	4	4.25	Y	FW	(Rubach et al. 2011)
Sigara arguta	Mort	Nymph	2	LC50	2.16	1.38-3.28	F	S	U	3	1	5	3	3	Q	FW	(Boonthai et al. 2000)
Simulium vittatum	Mort	2nd/3rd instar	1	LC50	0.06	0.04-0.08	F	S	U	4	2	5	3	3.5	Q	FW	(Hyder et al. 2004)
Simulium vittatum	Mort	4th/5th instar	1	LC50	0.11	0.0-0.24	F	S	U	4	2	5	3	3.5	Q	FW	(Hyder et al. 2004)
Simulium vittatum	Mort	4th/5th instar	1	LC50	0.13	0.12-0.14	F	S	U	4	2	5	3	3.5	Q	FW	(Hyder et al. 2004)
Simulium vittatum	Mort	6th/7th instar	1	LC50	0.68	0.49-0.87	F	S	U	4	2	5	3	3.5	Q	FW	(Hyder et al. 2004)
Simulium vittatum	Mort	6th/7th instar	1	LC50	0.91	0.75-1.07	F	S	U	4	2	5	3	3.5	Q	FW	(Hyder et al. 2004)
Simulium vittatum	Mort	larva	1	LC50	27	19-34	F	S	U	2	1	3	3	2.25	N	FW	(Siegfried 1993)
Simulium vittatum	Mort	6th/7th instar	2	LC50	0.28	0.25-0.33	A	S	M	4	3	5	4	4	Q	FW	(Overmyer et al. 2003)
Tanytarsus sp.	Mort	4th instar	1	LC50	600	NA	A	S	U	3	1	5	2	2.75	N	FW	(Ali 1981)
Xanthocnemis zealandica	Mort		2	LC50	8.4	4.02-17.64	F	S	U	3	1	5	3	3	Q	FW	(Boonthai et al. 2000)
Other Invertebrates																	
Acropora millepora	MetaM	Larva	0.75	EC50	1	0-3	F	S	U	3	1	5	3	3	Q	SW	(Markey et al. 2007)
Acropora millepora	Fert	Embryo	0.125	EC50	30	NA	F	S	U	3	1	5	3	3	Q	SW	(Markey et al. 2007)
Brachionus calyciflorus	Grow Rep	Neonate	2	EC50	360	NA	F	S	U	3	1	5	3	3	Q [c]	FW	(Snell and Moffat 1992)
Brachionus calyciflorus	Mort	Neonate	1	LC50	12000	10000-14000	F	S	U	2	1	5	3	2.75	N	FW	(Snell and Moffat 1992)
Brachionus calyciflorus	Mort	Neonate	2	LC50	12000	NA	F	S	U	3	1	5	3	3	Q	FW	(Snell and Moffat 1992)
Brachionus plicatilis	Mort	Nauplii	1	EC50	1400	NA	A	S	M	2	1	5	2	2.5	N	SW	(Guzzella et al. 1997)
Brachionus plicatilis	Mort	Nauplii	1	EC50	1700	NA	A	S	M	2	1	5	2	2.5	N	SW	(Guzzella et al. 1997)
Brachionus plicatilis	Mort	Nauplii	1	EC50	1900	NA	A	S	M	2	1	5	2	2.5	N	SW	(Guzzella et al. 1997)
Brachionus plicatilis	Mort	Neonate	1	LC50	10670	9310-12030	F	S	U	4	1	5	3	3.25	Q	SW	(Ferrando and Andreu-Moliner 1991)
Paracentrotus lividus	Deve	Egg	2	EC50	300	250-400	A	S	U	2	1	5	3	2.75	N	SW	(Bellas et al. 2005)
Ciona intestinalis	Deve	2-cell	0.833	EC50	5666	5087-6349	A	S	U	2	1	5	3	2.75	N	SW	(Bellas et al. 2005)
Mollusca																	
Aplexa hypnorum	Mort	Adult	4	LC50	>806	NA	A	F	M	3	3	5	3	3.5	Q	FW	(Phipps and Holcombe 1985)
Lampsilis siliquoidea	Mort	Juvenile	21	EC50	50	30-80	F	S	U	4	2	5	3	3.5	Q	FW	(Bringolf et al. 2007)
Lampsilis siliquoidea	Mort	Juvenile	21	EC50	60	30-140	A	S	U	4	2	5	3	3.5	Q	FW	(Bringolf et al. 2007)
Lampsilis siliquoidea	Mort	Juvenile	4	EC50	250	170-370	A	S	U	4	2	5	3	3.5	Q	FW	(Bringolf et al. 2007)
Lampsilis siliquoidea	Mort	Juvenile	4	EC50	330	260-420	F	S	U	4	2	5	3	3.5	Q	FW	(Bringolf et al. 2007)
Lampsilis siliquoidea	Mort	Glochidia	2	EC50	430	290-630	A	S	U	4	2	5	3	3.5	Q	FW	(Bringolf et al. 2007)
Lampsilis siliquoidea	Mort	Glochidia	2	EC50	600	400-900	F	S	U	4	2	5	3	3.5	Q	FW	(Bringolf et al. 2007)
Mytilus galloprovincialis	Deve	Embryo	2	EC50	153.5	137.0-172.7	A	S	U	3	1	5	3	3	Q [c]	SW	(Beiras and Bellas 2008)
Mytilus galloprovincialis	Mort	Adult	4	LC50	22500	NA	F	NR	NR	3	3	5	2	3.25	Q	SW	(Serrano et al. 1995)
Worms																	
Agamermis unka	Mort	Pre-	1	LC50	1210	650-2020	A	S	U	3	1	5	3	3	Q	FW	(Choo et al. 1998)

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		parasite															
Dugesia dorotocephala	Mort	20-25 mg	7	LC50	2000	NA	F	S	U	3	1	5	2	2.75	N	FW	(Villar et al. 1993)
Dugesia dorotocephala	Mort	20-25 mg	7	LC50	2200	NA	F	S	U	3	1	5	2	2.75	N	FW	(Villar et al. 1993)
Dugesia dorotocephala	Mort	20-25 mg	7	LC50	2500	NA	F	S	U	3	1	5	2	2.75	N	FW	(Villar et al. 1993)
Dugesia dorotocephala	Mort	20-25 mg	7	LC50	4300	NA	F	S	U	3	1	5	2	2.75	N	FW	(Villar et al. 1993)

Q* Original report not available but work conducted at US EPA Laboratory – qualified.

Key for exclusions from SSDa

- Excluded – Duration ≤ 48 hr or ≤ 96 hr
- Excluded – Less sensitive stage
- Excluded – Test of AI available
- Excluded – Renew. or flow-t. test available
- Excluded – See footnote on right

a Key to headers: GM µg/L = Geometric mean of multiple values; n = Number of data points use for calculating species geomean unless only one data point was available (n=1); Test item = Test substance (Active or Formulation); Expos. Type = Type of test (Flow through, static Renewal, or Static); Included. = Inclusion criterion (Y = acceptable, Q = qualified); Media = Exposure medium (Fresh Water or Salt Water); NR = Not recorded

Other reasons for exclusion: [b] DOM added. [c] Response not mortality.

SI Table 2 Toxicity values for chlorpyrifos oxon, CAS 5598152 to aquatic organisms

										Assessment of methods							
Species	**Group**	**Resp.**	**Test sub.**	**Expos. (d)**	**End-point**	**Meas. (µg L^{-1})**	**95% CI**	**Test item**	**Expos. type**	**Proc.**	**QA/QC**	**# conc.**	**Transp.**	**Streng.**	**Inc.**	**Media**	**Reference**
Acropora millepora	Coral	FERZ	Embryo	0.125	EC50	>30		A	S	3	1	5	3	3	Q	SW	(Markey et al. 2007)
Acropora millepora	Coral	MMPH	Larva	0.75	EC50	0.39		A	S	3	1	5	3	3	Q	SW	(Markey et al. 2007)
Daphnia magna	Crust	Mort	< 24 h old	1	LC50	> 15		A 87%	F	5	5	5	5	5	Y	FW	(Fournier 2010a)
Daphnia magna	Crust	Mort	< 24 h old	2	LC50	1.9	0.6-6.7	A 87%	F	5	5	5	5	5	Y	FW	(Fournier 2010a)
Lepomis macrochirus	Fish	Mort	46 mm	1	LC50	2.2	1.4-3.6	A 87%	F	5	5	5	5	5	Y	FW	(Fournier 2010b)
Lepomis macrochirus	Fish	Mort	46 mm	2	LC50	1.4	0.57-3.6	A 87%	F	5	5	5	5	5	Y	FW	(Fournier 2010b)
Lepomis macrochirus	Fish	Mort	46 mm	3	LC50	1.2	0.57-3.6	A 87%	F	5	5	5	5	5	Y	FW	(Fournier 2010b)
Lepomis macrochirus	Fish	Mort	46 mm	4	LC50	1.1	0.57-1.4	A 87%	F	5	5	5	5	5	Y	FW	(Fournier 2010b)
Rana boylii	Amphib	Mort	G32-44	4	LC50	> 5	NA	A 99%	S	3	1	3	3	2.5	N	FW	(Sparling and Fellers 2007)

a Key to headers: GM µg/L = Geometric mean of multiple values; n = Number of data points use for calculating species geomean unless only one data point was available (n=1); Test item = Test substance (Active or Formulation); Expos. Type = Type of test (Flow through, static Renewal, or Static); Included. = Inclusion criterion (Y = acceptable, Q = qualified); Media = Exposure medium (Fresh Water or Salt Water); NR = Not recorded

SI Table 3 Toxicity values for chlorpyrifos, CAS 5598152 to sediment organisms

												Assessment of methods							
Species	**Group**	**Resp.**	**Subject**	**Expos (d)**	**Endpoint**	**Meas. (µg kg^{-1})**	**95% CI**	**Meas. Ng g^{-1} OC**	**Test item**	**Expo. Type**	**Chem. Anal**	**Proc.**	**QA/QC**	**# conc**	**Transp.**	**Streng.**	**Inc.**	**Media**	**Reference**
Hyalella azteca	Crust.	Mort	7-14 d	10	LC50	399	355-448	2122	A	F	M	5	5	5	5	5	Y	FW	(Brown et al. 1997)
Chironomus dilutus	Insect	Mort	Larv 3rd	10	LC50	383	358-409	2037	A	F	M	5	5	5	5	5	Y	FW	(Brown et al. 1997)
Chironomus dilutus	Insect	Mort	Larv	10	LC50	468	307-714	5506	A	F	M	5	5	5	5	5	Y	FW	(Ankley et al. 1994)
Chironomus dilutus	Insect	Mort	Larv	10	LC50	299	142-628	9956	A	F	M	5	5	5	5	5	Y	FW	(Ankley et al. 1994)

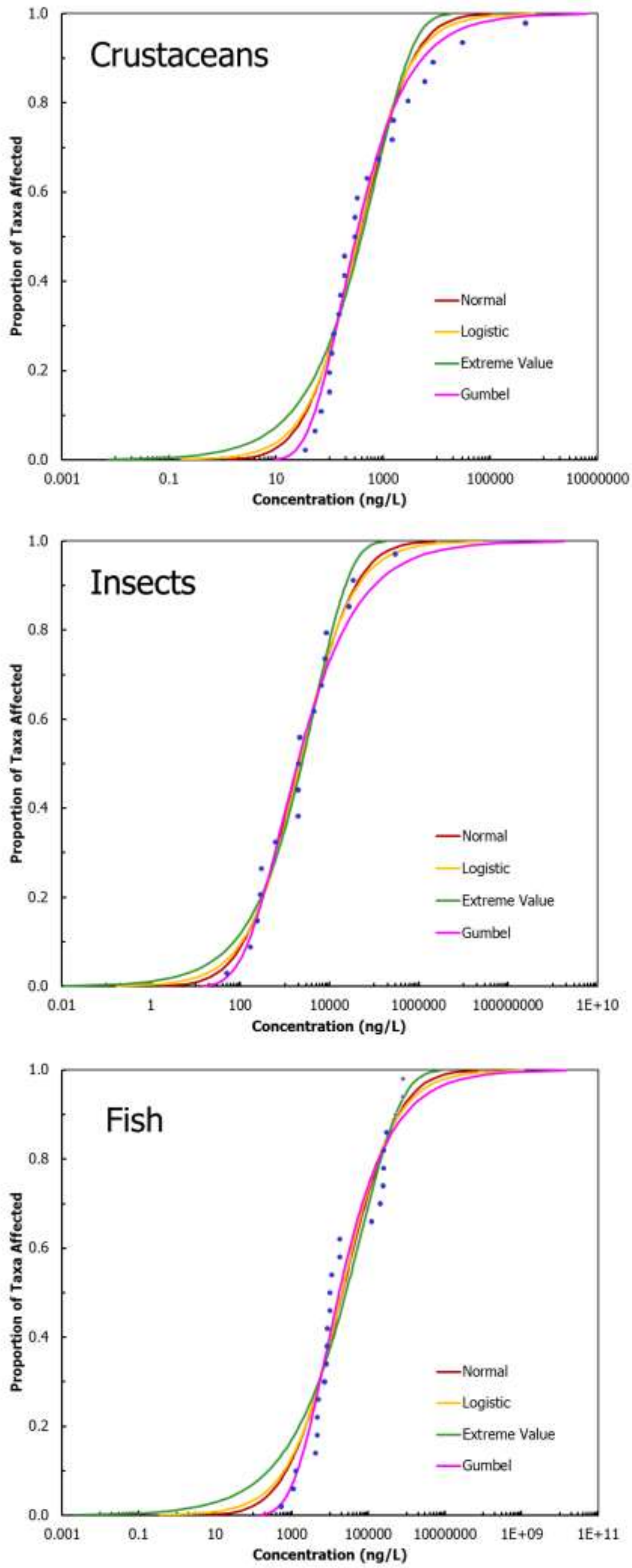
a Key to headers: GM µg/L = Geometric mean of multiple values; n = Number of data points use for calculating species geomean unless only one data point was available (n=1); Test item = Test substance (Active or Formulation); Expos. Type = Type of test (Flow through, static Renewal, or Static); Included. = Inclusion criterion (Y = acceptable, Q = qualified); Media = Exposure medium (Fresh Water or Salt Water); NR = Not recorded

SI Table 4 Summary Statistics from SSD Master v. 3.0

Crustacea	Normal	Logistic	Extreme Value	Gumbel
∑ei2	0.0914	0.0884	0.1533	0.0423
MSE	0.0044	0.0042	0.0073	0.0020
Data from specified distribution? Anderson-Darling (n>5)	Yes	Yes	No	Yes
A2	1.120	0.847	2.434	0.364
HC5 (µg L^{-1})	0.017	0.014	0.005	0.034
Lower confidence limit on the mean (expected HC5)	0.01	0.006	0.001	0.022
Upper confidence limit on the mean (expected HC5)	0.022	0.031	0.025	0.051

Insects	Normal	Logistic	Extreme Value	Gumbel
∑ei2	0.0307	0.0315	0.0362	0.0378
MSE	0.0024	0.0024	0.0028	0.0029
Data from specified distribution? Anderson-Darling (n>5)	Yes	Yes	Yes	Yes
A^2	0.695	0.714	0.656	0.813
HC5 (µg L^{-1})	0.052	0.039	0.019	0.087
Lower confidence limit on the mean (expected HC5)	0.033	0.022	0.006	0.057
Upper confidence limit on the mean (expected HC5)	0.082	0.069	0.055	0.133

Fish	Normal	Logistic	Extreme Value	Gumbel
∑ei2	0.1460	0.1492	0.1941	0.1087
MSE	0.0066	0.0068	0.0088	0.0049
Data from specified distribution? Anderson-Darling (n>5)	Yes	Yes	Yes	Yes
A^2	0.949	0.982	1.242	0.733
HC5 (µg L^{-1})	0.278	0.193	0.041	0.812
Lower confidence limit on the mean (expected HC5)	0.201	0.075	0.006	0.507
Upper confidence limit on the mean (expected HC5)	0.385	0.493	0.297	1.298



SI Fig. 1 Cumulative distribution function (CDF) models fitted to the Species Sensitivity Distributions (SSDs) for CPY in crustaceans, insects, and fish using SSD Master v. 3.0.

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