

Supplementary Materials

Global Occurrence and Ecological Risk Assessment of 6PPD and 6PPD-Quinone: Derivation of PNECs Using Species Sensitivity Distribution

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Text S1. R Scripts for SSD Fitting and Probabilistic Ecological Risk Assessment

Script S1. Model-Averaged SSD Fitting and HC₅ Derivation

```
fit_ssd_average <- function(conc_vec, n_points = 5000) {

  # Data cleaning
  conc_vec <- conc_vec[!is.na(conc_vec) & conc_vec > 0]
  n <- length(conc_vec)

  if (n < 3) {
    ln <- log(conc_vec)
    pseq <- seq(0.0001, 0.9999, length.out = n_points)
    conc <- exp(mean(ln) + qnorm(pseq) * sd(ln))

    curve <- tibble(
      percent = pseq * 100,
      conc = conc,
      conc_lwr = conc,
      conc_upr = conc
    )

    HC5 <- exp(mean(ln) + qnorm(0.05) * sd(ln))
    return(list(HC5 = HC5, curve = curve))
  }

  safe_fit <- function(expr) tryCatch(expr, error = function(e) NULL)

  fits <- list(
```

```

lnorm    = safe_fit(fitdist(conc_vec, "lnorm")),
llogis   = safe_fit(fitdist(conc_vec, "llogis")),
weibull  = safe_fit(fitdist(conc_vec, "weibull")),
gamma    = safe_fit(
  fitdist(
    conc_vec, "gamma",
    start = list(shape = 1, rate = 1 / mean(conc_vec)),
    lower = c(0.001, 0.001)
  )
)
)

fits <- fits[!sapply(fits, is.null)]
if (length(fits) == 0) stop("SSD fitting failed")

# AICc-based model weights
k <- 2
AICc <- sapply(fits, function(f) f$aic + 2 * k * (k + 1) / (n - k - 1))
weights <- exp(-0.5 * (AICc - min(AICc)))
weights <- weights / sum(weights)

# Generate SSD curves
pseq <- seq(0.0001, 0.9999, length.out = n_points)

get_quantile <- function(fit, dist, p) {
  par <- fit$estimate
  switch(dist,
    lnorm    = qlnorm(p, par["meanlog"], par["sdlog"]),
    llogis   = qllogis(p, par["shape"], par["scale"]),
    weibull  = qweibull(p, par["shape"], par["scale"]),
    gamma    = qgamma(p, par["shape"], par["rate"]))
}

q_list <- Map(
  function(fit, dist) get_quantile(fit, dist, pseq),
  fits,
  names(fits)
)

conc_avg <- Reduce(`+`, Map(`*`, q_list, weights[names(q_list)]))

curve <- tibble(
  percent = pseq * 100,
  conc = conc_avg,
  conc_lwr = conc_avg,

```

```

      conc_upr = conc_avg
    )

    HC5 <- approx(curve$percent, curve$conc, xout = 5)$y

    list(HC5 = HC5, curve = curve)
  }

```

Script S2. Joint Probability Curve (JPC) Analysis

```

compute_jpc_kde <- function(samples_exp, ssd_df, n_points = 1000) {

  samples_exp <- samples_exp[!is.na(samples_exp) & samples_exp > 0]

  kde <- density(log(samples_exp), n = 10000)
  cdf_exp <- approxfun(
    kde$x,
    cumsum(kde$y) / sum(kde$y),
    yleft = 0,
    yright = 1
  )

  endpoints <- unique(ssd_df$endpoint)
  percent_species <- seq(0, 100, length.out = n_points)

  jpc_list <- lapply(endpoints, function(ep) {

    ssd_ep <- ssd_df %>% filter(endpoint == ep)

    conc_interp <- approx(
      ssd_ep$percent,
      ssd_ep$conc,
      xout = percent_species,
      rule = 2
    )$y

    risk <- 1 - cdf_exp(log(conc_interp))
    risk <- pmin(pmax(risk, 0), 1)

    tibble(
      percent_species = percent_species,
      endpoint = ep,
      exceed_prob = risk * 100
    )
  })
}

```

```

    bind_rows(jpc_list)
  }

```

Script S3. DBQ Exceedance Probability Analysis

```

compute_dbq_distribution_smooth <- function(
  samples,
  hc5,
  AF = 5,
  n_points = 1000
){

  PNEC <- hc5 / AF
  DBQ <- samples / PNEC
  DBQ <- DBQ[is.finite(DBQ) & DBQ > 0]

  if (length(DBQ) < 10) {
    return(tibble(log10_DBQ = NA_real_, exceed_prob = NA_real_))
  }

  logDBQ <- log10(DBQ)

  safe_fit <- function(expr) tryCatch(expr, error = function(e) NULL)

  fits <- list(
    norm = safe_fit(fitdist(logDBQ, "norm")),
    logis = safe_fit(fitdist(logDBQ, "logis")),
    gev = safe_fit(
      fitdist(
        logDBQ, "gev",
        start = list(
          loc = mean(logDBQ),
          scale = sd(logDBQ),
          shape = 0.1
        )
      )
    )
  )

  fits <- fits[!sapply(fits, is.null)]

  x_range <- range(logDBQ)
  x_seq <- seq(x_range[1] - 1, x_range[2] + 1, length.out = n_points)

```

```

if (length(fits) == 0) {
  exceed_prob <- sapply(x_seq, function(x) mean(logDBQ >= x))
} else {
  aics <- sapply(fits, function(f) f$aic)
  best <- fits[[which.min(aics)]]
  best_name <- names(fits)[which.min(aics)]

  exceed_prob <- switch(
    best_name,
    norm = 1 - pnorm(x_seq, best$estimate["mean"], best$estimate["sd"]),
    logis = 1 - plogis(x_seq, best$estimate["location"], best$estimate["scale"]),
    gev = 1 - pgev(
      x_seq,
      loc = best$estimate["loc"],
      scale = best$estimate["scale"],
      shape = best$estimate["shape"]
    )
  )
}

tibble(
  log10_DBQ = x_seq,
  exceed_prob = exceed_prob
)
}

```

Table S1. Levels of 6PPD and 6PPD-Q in surface runoff around the world.

Study Area	Location	Longitude	Latitude	Compound	Concentration (ng/L)			References
					Range	Mean	Median	
Asia								
China	Surface water of the pearl river	113.25	23.1167	6PPD	0.50–38.6	3.64	1.45	[1]
				6PPD-Q	0.20–4.90	1.42	1.2	
China	Kowloon, Hong Kong	114.1589	22.2936	6PPD	0.21–2.71		0.32	[2]
				6PPD-Q	0.21–2.43		1.12	
China	Courtyard, Guangdong province	114.2538	23.0572	6PPD	0.19–1.10	0.72	0.89	[3]
				6PPD-Q	6.03–875	122	51.6	
	Road, Guangdong province	114.3053	23.0583	6PPD	0.41–7.52	3.36	3.05	
				6PPD-Q	38.5–1562	636	576	
	Farmland, Guangdong province	114.1435	23.0296	6PPD	ND	ND	ND	
				6PPD-Q	0.53–5.58	1.61	0.73	
Europe								
Norway	Homla	25.6731	71.1851	6PPD-Q	110–143	129.6	136	[4]
Germany	Leipzig, Germany	12.373075	51.3396	6PPD	65–783	210		[5]
				6PPD-Q	110–428			
North America								
Canada	Northfield Creek Sites	123.965139	49.19105	6PPD-Q	80–120			[6]
America	The Sacramento–San Joaquin Delta	–121.79468	38.30658	6PPD-Q	0.43–21	4.88	3.00	[7]
America	Mississippi River	–93.1022	44.9551	6PPD	0.1–7.2			[8]
America	Seattle	–122.3506	47.6206	6PPD-Q	800–19000			[9]
	Los Angeles	–117.8220	33.7109	6PPD-Q	4100–6100			
	San Francisco	–122.1425	37.6624	6PPD-Q	1000–3500			

ND indicates data not detectable.

Table S2. Levels of 6PPD and 6PPD-Q in wastewater treatment plants around the world.

Study Area	Location	Longitude	Latitude	Compound	Concentrations (ng/L)			References
					Range	Mean	Median	
Asia								
China	Guangzhou (influent)	113.39	23.15	6PPD-Q		69.8 ± 2.4		[3]
	Guangzhou (effluent)	113.39	23.15	6PPD-Q		ND		
China	Guangzhou (influent)	113.26	23.18	6PPD-Q		14.2 ± 0.8		
	Guangzhou (effluent)	113.26	23.18	6PPD-Q		2.09 ± 0.16		
China	Guangzhou (influent)	113.39	23.11	6PPD-Q		69.3 ± 6.4		
	Guangzhou (effluent)	113.39	23.11	6PPD-Q		ND		
China	Hong Kong (effluent)	113.49	22.08	6PPD	<LOQ–15		0.30	[10]
				6PPD-Q	1.1–37		3.4	
China	Hong Kong (influent)	113.49	22.08	6PPD	1.1–59		12	
				6PPD-Q	1.9–470		53	
China	Guangzhou (influent) A	112.57	22.26	6PPD	0.29–3.11	1.18 ± 0.35		[11]
				6PPD-Q	1.33–10.5	6.07 ± 1.36		
China	Guangzhou (effluent) A	112.57	22.26	6PPD	<MDL–0.16	0.05 ± 0.03		
				6PPD-Q	0.06–1.77	0.84 ± 0.23		
China	Guangzhou (influent) B	112.57	22.26	6PPD	1.46–6.69	3.36 ± 1.67		
				6PPD-Q	2.49–10.0	6.17 ± 2.17		
China	Guangzhou (effluent) B	112.57	22.26	6PPD	0.07–0.16	0.11 ± 0.02		
				6PPD-Q	0.90–3.08	1.71 ± 0.48		
North America								
America	New York (influent)	73.5	40.42	6PPD	5.85–27.0	11.5 ± 7.60	8.23	[12]
				6PPD-Q	3.93–21.0	8.24 ± 5.78	6.15	
America	New York (primary effluent)	73.5	40.42	6PPD	5.90–7.40	6.56 ± 0.69	6.48	
				6PPD-Q	4.26–15.6	8.11 ± 5.22	6.29	
America	New York (final effluent)	73.5	40.42	6PPD	5.00–5.90	5.31 ± 0.28	5.20	
				6PPD-Q	2.16–6.75	3.72 ± 1.61	3.12	
Australia								
Australia	Brisbane River	153.028	–27.468	6PPD-Q	0.38–88	20.75	17.5	[13]

ND indicates data not detectable.

Table S3. Levels of 6PPD and 6PPD-Q in rivers around the world.

Study Area	Location	Longitude	Latitude	Compound	Concentrations (ng/L)			References
					Range	Mean	Median	
Asia								
China	Pearl River	113.6047	23.6928	6PPD	0.31–1.07	0.56	0.48	[3]
				6PPD-Q	0.26–11.3	2.34	1.51	
	Dongjiang River	114.5958	23.4017	6PPD	0.27–1.29	0.47	0.36	
				6PPD-Q	0.29–8.12	1.69	0.91	
China	Songhua–Liao River	126.5994	45.6939	6PPD	0.11–3.67	1.09	0.64	[14]
				6PPD-Q	10.0–85.4	30.7	18.7	
	Huang River	111.6845	40.8170	6PPD	0.35–1.17	0.66	0.63	
				6PPD-Q	9.94–199	46.7	16.3	
	Hai River	114.5314	36.9125	6PPD	0.17–1.63	0.67	0.30	
				6PPD-Q	8.80–35.2	20.8	17.7	
	Yangtze River	115.1442	25.9725	6PPD	0.11–4.15	1.23	0.94	
				6PPD-Q	10.1–183	44.4	33.2	
	Pearl River	110.2992	25.2797	6PPD	0.07–15.3	3.75	0.76	
				6PPD-Q	7.22–119	36.0	16.7	
	Tarim River	84.2522	41.7728	6PPD	0.19–7.38	3.78	3.78	
				6PPD-Q	11.8–64.0	37.9	37.9	
Brahmaputra River	91.1164	29.6425	6PPD	0.36–0.51	0.43	0.43		
			6PPD-Q	16.7–26.3	21.5	21.5		
Southeast River	119.3015	25.9852	6PPD	0.25–0.46	0.36	0.36		
			6PPD-Q	11.3–14.8	13.0	13.0		
China	Jiaojiang River	121.3067	28.5736	6PPD	4.0–72	12	10	[15]
				6PPD-Q	<LOD–21	7.0	6.1	
China	Liuxi River	113.5161	23.4888	6PPD	ND			[16]
				6PPD-Q	ND–0.75	0.23	0.18	
China	Urban streams in Guangzhou	113.2647	23.1089	6PPD	ND–4.30	0.11	ND	[17]
				6PPD-Q	ND–40.0	9.32	4.55	
North America								
Canada	Northfield Creek	–123.9644	49.1915	6PPD-Q	31.6–169.6	86.8	95.7	[6]
Canada	Don River	–79.3614	43.6858	6PPD-Q	930–2850	2020	2385	[18]
Canada	Greater Toronto Area	–79.1916	43.7782	6PPD-Q	2.0–82.3	23.8	10.5	[19]
America	Longfellow Creek	–122.3661	47.55361	6PPD-Q	1.71–27.4	12.2	11.2	[20]
America	Miller Creek	–122.3466	47.4511	6PPD	14–170	99.4	120	[21]
				6PPD-Q	46–110	89.4	99	
Oceania								
Australia	Brisbane River (Cubberla Creek)	152.9569	–27.5169	6PPD-Q	0.38–88	18.5	17.5	[13]

ND indicates data not detectable.

Table S4. Compilation of 6PPD and 6PPD-Q concentration (ng/L) data.

Site	Longitude	Latitude	6PPD	6PPD-Q
SR1	113.25	23.1167	3.64	1.42
SR2	114.1589	22.2936	0.32	1.12
SR3	114.2538	23.0572	0.72	122
SR4	114.3053	23.0583	3.36	636
SR5	114.1435	23.0296	0	1.61
SR6	25.6731	71.1851	NA	129.6
SR7	12.37308	51.3396	210	269
SR8	123.9651	49.19105	NA	100
SR9	−121.795	38.30658	NA	4.88
SR10	−93.1022	44.9551	3.65	NA
SR11	−122.351	47.6206	NA	9900
SR12	−117.822	33.7109	NA	5100
SR13	−122.143	37.6624	NA	2250
WE1	113.39	23.15	NA	0
WE2	113.26	23.18	NA	2.09
WE3	113.39	23.11	NA	0
WE4	113.49	22.08	0.3	3.4
WE5	112.57	22.26	0.05	0.84
WE6	112.57	22.26	0.11	1.71
WE7	73.5	40.42	5.31	3.72
WE8	153.028	−27.468	NA	20.75
RW1	113.6047	23.6928	0.56	2.34
RW2	114.5958	23.4017	0.47	1.69
RW3	126.5994	45.6939	1.09	30.7
RW4	111.6845	40.817	0.66	46.7
RW5	114.5314	36.9125	0.67	20.8
RW6	115.1442	25.9725	1.23	44.4
RW7	110.2992	25.2797	3.75	36
RW8	84.2522	41.7728	3.78	37.9
RW9	91.1164	29.6425	0.43	21.5
RW10	119.3015	25.9852	0.36	13
RW11	121.3067	28.5736	12	7
RW12	113.5161	23.4888	0	0.23
RW13	113.2647	23.1089	0.11	9.32
RW14	−123.964	49.1915	NA	86.8
RW15	−79.3842	43.6539	NA	2020
RW16	−79.1916	43.7782	NA	23.8
RW17	−122.366	47.55361	NA	12.2
RW18	−122.347	47.4511	99.4	89.4
RW19	152.9569	−27.5169	NA	18.5

NA indicates data not available.

Table S5. Range of average 6PPD and 6PPD-Q concentrations in various water body types across continents (ng/L).

Continent	Surface runoffs		WWTPs		Rivers	
	6PPD	6PPD-Q	6PPD	6PPD-Q	6PPD	6PPD-Q
Asia	<MDL–3.6	1.1–636	0.1–0.3	<MDL–3.4	<MDL–12	0.2–47
Europe	210	130–269	–	–	–	–
North America	3.65	4.9–9900	5.3	3.7	99.4	12–2020
Oceania	–	–	–	21	–	18.5

Table S6. Toxicity data of 6PPD and 6PPD-Q collected from ECOTOX and published literatures.

Species	Species Group	Measurement	Endpoint	Con.(µg/L)	Duration (d)	Reference
6PPD						
<i>Oncorhynchus kisutch</i>	Fish	Mortality	LC50	250	1	[9]
<i>Gobiocypris rarus</i>	Fish	Mortality	LC50	162	4	[26]
<i>Gobiocypris rarus</i>	Fish	Mortality	LC50	201	4	[26]
<i>Gobiocypris rarus</i>	Fish	Mortality	LC50	0.1201	4	[26]
<i>Danio rerio</i>	Fish	Mortality	LC50	1384.93	1	[27]
<i>Danio rerio</i>	Fish	Mortality	LC50	816.9	2	[27]
<i>Danio rerio</i>	Fish	Mortality	LC50	609.39	3	[27]
<i>Danio rerio</i>	Fish	Mortality	LC50	442.62	4	[27]
<i>Danio rerio</i>	Fish	Growth	LOEC	10	4	[27]
<i>Danio rerio</i>	Fish	Physiology	LOEC	25	4	[27]
<i>Danio rerio</i> (larval)	Fish	Mortality	LC50	737	4	[28]
<i>Danio rerio</i> (larval)	Fish	Physiology	LOEC	100	4	[28]
<i>Danio rerio</i> (embryo)	Fish	Mortality	LC50	2200	5	[29]
<i>Danio rerio</i> (embryo)	Fish	Development	LOEC	22	5	[29]
<i>Danio rerio</i> (embryo)	Fish	Reproduction	LOEC	22	5	[29]
<i>Danio rerio</i> (embryo)	Fish	Physiology	LOEC	22	5	[29]
<i>Danio rerio</i> (embryo)	Fish	Growth	LOEC	22	5	[29]
<i>Danio rerio</i> (embryo)	Fish	Genetic	LOEC	2.2	5	[29]
<i>Danio rerio</i> (embryo)	Fish	Enzymes	LOEC	2.2	5	[29]
<i>Eichhornia crassipes</i>	Macrophyte	Physiology	LOEC	10	21	[30]
<i>Chlorella vulgaris</i>	Alga	Physiology	LOEC	200	10	[31]
<i>Chlorella vulgaris</i>	Alga	Biochemistry	LOEC	200	10	[31]
<i>Selenastrum capricornutum</i>	Alga	Growth	IC50	8780	4	[32]
<i>Ceratophyllum demersum</i> L. (Juvenile)	Macrophyte	Biochemistry	NOEC	>1	21	[33]
<i>Daphnia pulex</i>	Crustacean	Mortality	NOEC	>10	21	[34]
<i>Daphnia pulex</i>	Crustacean	Growth	LOEC	>10	21	[34]
<i>Pelophylax nigromaculatus</i> (male)	Amphibian	Biochemistry	LOEC	1	21	[35]
<i>Pelophylax nigromaculatus</i> (male)	Amphibian	Development	LOEC	1	21	[35]
<i>Pelophylax nigromaculatus</i> (male)	Amphibian	Genetic	LOEC	1	21	[35]
<i>Pelophylax nigromaculatus</i> (male)	Amphibian	Enzymes	LOEC	1	21	[35]
<i>Pocillopora damicornis</i> (larvae)	Coral	Mortality	LC50	14,740	1	[36]
<i>Pocillopora damicornis</i> (larvae)	Coral	Mortality	LC50	8770	2	[36]
<i>Pocillopora damicornis</i> (larvae)	Coral	Mortality	LC50	4630	3	[36]
<i>Pocillopora damicornis</i> (larvae)	Coral	Mortality	LC50	2160	4	[36]
<i>Pocillopora damicornis</i> (recruit)	Coral	Mortality	LC50	10,230	1	[36]
<i>Pocillopora damicornis</i> (recruit)	Coral	Mortality	LC50	8940	2	[36]
<i>Pocillopora damicornis</i> (recruit)	Coral	Mortality	LC50	4670	3	[36]
<i>Pocillopora damicornis</i> (recruit)	Coral	Mortality	LC50	2610	4	[36]
<i>Danio rerio</i> (juvenile)	Fish	Mortality	NOEC	>137	4	[37]
<i>Oryzias latipes</i> (embryo)	Fish	Mortality	LC80	107	4	[37]
<i>Daphnia magna</i>	Crustacean	Mortality	LC100	138	2	[37]
<i>Hyalella azteca</i>	Crustacean	Mortality	LC100	286	4	[37]
<i>Hyalella azteca</i>	Crustaceans	Growth	EC50	155	28	ECOTOX
<i>Hyalella azteca</i>	Crustacean	Growth	EC50	16	28	ECOTOX
<i>Hyalella azteca</i>	Crustacean	Growth	EC50	5	28	ECOTOX
<i>Hyalella azteca</i>	Crustaceans	Growth	EC50	5	28	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	EC50	1700	1	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	EC50	510	2	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	EC50	230	2	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	EC50	3480	0.0833	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	EC50	2220	1	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	EC50	5580	0.0833	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	EC50	1010	1	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	EC50	2090	0.0833	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	EC50	980	1	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	EC50	930	2	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	EC50	400	1	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	EC50	230	2	ECOTOX
<i>Hyalella azteca</i>	Crustacean	Mortality	LC50	250	4	ECOTOX
<i>Hyalella azteca</i>	Crustaceans	Mortality	LC50	48	4	ECOTOX
<i>Hyalella azteca</i>	Crustacean	Mortality	LC50	13	28	ECOTOX
<i>Hyalella azteca</i>	Crustacean	Growth	EC50	155	28	ECOTOX
<i>Hyalella azteca</i>	Crustaceans	Growth	EC50	16	28	ECOTOX

<i>Hyalella azteca</i>	Crustacean	Mortality	LC50	5	28	ECOTOX
<i>Hyalella azteca</i>	Crustacean	Growth	EC50	5	28	ECOTOX
<i>Hyalella azteca</i>	Crustaceans	Growth	EC50	5	28	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LC50	29	4	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	2000	2	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	480	3	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	450	4	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	410	5	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	350	6	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	350	7	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	350	8	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	320	9	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	320	10	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	300	11	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	300	12	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	300	13	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	270	14	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	240	15	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	210	16	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	200	17	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	180	18	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	170	19	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	170	20	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	170	21	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	160	22	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	160	23	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	160	24	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	160	25	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	150	26	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	150	27	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LC50	150	28	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	280	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	180	2	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	140	4	ECOTOX
<i>Lepomis macrochirus</i>	Fish	Mortality	LC50	650	1	ECOTOX
<i>Lepomis macrochirus</i>	Fish	Mortality	LC50	450	2	ECOTOX
<i>Lepomis macrochirus</i>	Fish	Mortality	LC50	400	4	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LC50	870	5	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LC50	2240	4	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LC50	180	1	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LC50	80	2	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LC50	50	3	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LC50	28	4	ECOTOX
<i>Oncorhynchus kisutch</i>	Fish	Cell(s)	EC50	213.1	2.1667	ECOTOX
<i>Oncorhynchus kisutch</i>	Fish	Cell(s)	EC50	401.2	2.1667	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Cell(s)	EC50	4300	1	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	2.2	2	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	22	2	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	220	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	220	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	220	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	220	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	220	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	22	5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	220	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	22	4	ECOTOX

<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2.2	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	22	4	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	2.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	2.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	22	5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	2.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	22	5	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	220	5	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	1	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	2	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	3	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	1	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	2	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	3	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	25	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	1	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	10	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	25	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	10	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	25	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	1	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	137	3	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	137	4	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	137	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	500	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	500	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	500	4.8333	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	3	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	1000	4	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	500	4	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	500	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	1000	0.5	ECOTOX
<i>Daphnia magna</i>	Crustacean	Intoxication	NOEC	250	2	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Intoxication	LOEC	500	2	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1500	0.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1500	1.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1000	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	1250	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1000	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	1250	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	700	4	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	10	3	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	100	3	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	1.35	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	28.2	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	1.35	7	ECOTOX

Danio rerio	Fish	Genetics	LOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Enzyme(s)	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Enzyme(s)	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Enzyme(s)	NOEC	1.35	7	ECOTOX
Danio rerio	Fish	Enzyme(s)	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Enzyme(s)	NOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	LOEC	28.2	7	ECOTOX
Danio rerio	Fish	Genetics	NOEC	10	3	ECOTOX
Danio rerio	Fish	Genetics	LOEC	100	3	ECOTOX
Danio rerio	Fish	Genetics	NOEC	100	3	ECOTOX
Danio rerio	Fish	Genetics	NOEC	10	3	ECOTOX
Danio rerio	Fish	Genetics	LOEC	100	3	ECOTOX
Danio rerio	Fish	Genetics	NOEC	10	3	ECOTOX
Danio rerio	Fish	Genetics	LOEC	100	3	ECOTOX
Danio rerio	Fish	Genetics	NOEC	10	3	ECOTOX
Danio rerio	Fish	Genetics	LOEC	100	3	ECOTOX
Danio rerio	Fish	Genetics	NOEC	10	3	ECOTOX
Danio rerio	Fish	Genetics	LOEC	100	3	ECOTOX
Danio rerio	Fish	Morphology	LOEC	10	3	ECOTOX
Danio rerio	Fish	Behavior	LOEC	25	0.6667	ECOTOX
Danio rerio	Fish	Physiology	LOEC	25	1.6667	ECOTOX
Danio rerio	Fish	Mortality	NOEC	25	1.6667	ECOTOX
Danio rerio	Fish	Mortality	LOEC	100	1.6667	ECOTOX
Danio rerio	Fish	Development	LOEC	25	4.6667	ECOTOX
Danio rerio	Fish	Morphology	LOEC	25	4.6667	ECOTOX
Danio rerio	Fish	Morphology	NOEC	200	4.6667	ECOTOX
Danio rerio	Fish	Morphology	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Morphology	NOEC	100	4.6667	ECOTOX
Danio rerio	Fish	Morphology	LOEC	25	4.6667	ECOTOX
Danio rerio	Fish	Morphology	LOEC	25	4.6667	ECOTOX
Danio rerio	Fish	Morphology	NOEC	200	4.6667	ECOTOX
Danio rerio	Fish	Morphology	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Physiology	NOEC	100	1.6667	ECOTOX
Danio rerio	Fish	Physiology	LOEC	200	1.6667	ECOTOX
Danio rerio	Fish	Mortality	NOEC	1200	2.6667	ECOTOX
Danio rerio	Fish	Mortality	NOEC	1200	4.6667	ECOTOX
Danio rerio	Fish	Accumulation	NOEC	25	4.6667	ECOTOX
Danio rerio	Fish	Accumulation	LOEC	200	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Genetics	LOEC	400	4.6667	ECOTOX
Danio rerio	Fish	Growth	LOEC	400	5	ECOTOX
Danio rerio	Fish	Cell(s)	NOEC	173.25	0.5	ECOTOX
Danio rerio	Fish	Cell(s)	NOEC	173.25	1	ECOTOX
Danio rerio	Fish	Mortality	NOEC	173.25	0.9167	ECOTOX
Danio rerio	Fish	Mortality	NOEC	173.25	1.9167	ECOTOX

<i>Danio rerio</i>	Fish	Mortality	LOEC	1.07	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	173.25	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	173.25	0.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	173.25	1.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	173.25	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	173.25	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	9.22	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	173.25	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Development	NOEC	9.22	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Development	LOEC	173.25	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	1.07	1.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	9.22	1.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	9.22	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	173.25	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	9.22	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	173.25	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	9.22	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	173.25	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	9.22	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	173.25	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	9.22	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	173.25	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	173.25	4.9167	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	21	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	LOEC	1922.64	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	NOEC	909.63	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	NOEC	909.63	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	LOEC	1922.64	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	NOEC	1922.64	4	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	NOEC	1922.64	7	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Population	NOEC	1922.64	10	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	LOEC	1922.64	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	LOEC	1922.64	4	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	NOEC	1922.64	7	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	NOEC	1922.64	10	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Enzyme(s)	LOEC	1922.64	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Enzyme(s)	NOEC	1922.64	4	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Enzyme(s)	NOEC	1922.64	7	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Enzyme(s)	NOEC	1922.64	10	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Enzyme(s)	LOEC	1922.64	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Enzyme(s)	NOEC	1922.64	7	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	LOEC	1922.64	1	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	NOEC	1922.64	7	ECOTOX
<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	LOEC	1922.64	1	ECOTOX

<i>Chlorella pyrenoidosa</i>	Algae	Biochemistry	NOEC	1922.64	7	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	342.3	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	24.2	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	89.9	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	400	5	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1200	3	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	1600	3	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	400	3	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	400	7	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	50	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	LOEC	100	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Physiology	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Algae	Population	NOEC	400	10	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	100	3	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	200	3	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	400	3	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	100	5	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	200	5	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	NOEC	93.7	15	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	NOEC	38.5	10.77-12.05	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LOEC	93.7	10.77-12.05	ECOTOX
<i>Oryzias latipes</i>	Fish	Development	NOEC	93.7	13	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	NOEC	38.5	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LOEC	93.7	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	NOEC	38.5	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Mortality	LOEC	93.7	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Development	NOEC	38.5	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Development	LOEC	93.7	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Growth	NOEC	3.71	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Growth	LOEC	11	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Growth	NOEC	3.71	41	ECOTOX
<i>Oryzias latipes</i>	Fish	Growth	LOEC	11	41	ECOTOX

<i>Danio rerio</i>	Fish	Biochemistry	NOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	10	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	10	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	7	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	100	7	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	200	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	500	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	1000	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	200	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	500	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	200	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	500	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	200	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	500	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	100	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	200	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	500	1.5833	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	1000	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	20	3.5833	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	100	3.5833	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Feeding behavior	NOEC	18.9	21	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Development	NOEC	18.9	21	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	LOEC	0.019	21	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	NOEC	18.9	3 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	NOEC	18.9	2 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	NOEC	18.9	3 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Population	NOEC	18.9	2 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Population	NOEC	18.9	3 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	LOEC	0.019	21	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	NOEC	18.9	2 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Reproduction	NOEC	18.9	2 Generation	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Population	NOEC	18.9	2 Generation	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	7.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	200	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	7.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	200	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	200	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	10	2.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	200	2.75	ECOTOX

<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	NOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Histology	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	10	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Development	LOEC	10	4.75	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	NOEC	2700	1	ECOTOX
<i>Pimephales promelas</i>	Fish	Mortality	LOEC	8600	1	ECOTOX
<i>Pimephales promelas</i>	Fish	Genetics	LOEC	270	1	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	430	6	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	1300	6	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	1300	6	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	130	6	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	430	6	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	430	6.07	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	430	6.07	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	130	0.0451	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	430	0.0451	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	130	0.0451	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	430	0.0451	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Growth	NOEC	10	21	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Growth	NOEC	10	21	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	21	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	21	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	10-12	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	13-15	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	21	ECOTOX
6PPD-Q						
<i>Oncorhynchus kisutch</i> (juvenile)	Fish	Mortality	LC50	0.79	1	[9]
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	2.26	4	[26]
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	4.31	4	[26]
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	1.66	4	[26]
<i>Danio rerio</i> (embryo)	Fish	Mortality	LC50	308.67	1	[27]
<i>Danio rerio</i>	Fish	Mortality	LC50	224.56	2	[27]
<i>Danio rerio</i>	Fish	Mortality	LC50	171.63	3	[27]
<i>Danio rerio</i>	Fish	Mortality	LC50	132.92	4	[27]
<i>Danio rerio</i>	Fish	Growth	LOEC	10	4	[27]
<i>Danio rerio</i>	Fish	Physiology	LOEC	10	4	[27]
<i>Eichhornia crassipes</i>	Macrophyte	Physiology	LOEC	10	21	[30]
<i>Chlorella vulgaris</i>	Alga	Physiology	LOEC	400	10	[31]
<i>Chlorella vulgaris</i>	Alga	Biochemistry	LOEC	400	10	[31]
<i>Selenastrum capricornutum</i>	Alga	Growth	NOEC	>10000	4	[32]
<i>Ceratophyllum demersum</i> L. (Juvenile)	Macrophyte	Biochemistry	LOEC	0.1	21	[33]
<i>Daphnia pulex</i>	Crustacean	Mortality	NOEC	>10	21	[34]
<i>Daphnia pulex</i>	Crustacean	Mortality	LOEC	0.1	21	[34]
<i>Oncorhynchus kisutch</i> (juvenile)	Fish	Mortality	LC50	0.095	1	[38]
<i>Danio rerio</i> (juvenile)	Fish	Mortality	NOEC	>54	4	[37]
<i>Oryzias latipes</i> (embryo)	Fish	Mortality	NOEC	>34	4	[37]
<i>Daphnia magna</i>	Crustacean	Mortality	NOEC	>46	2	[37]
<i>Hyalalella azteca</i>	Crustacean	Mortality	NOEC	>43	4	[37]
<i>Sciaenops ocellatus</i>	Fish	Mortality	LC50	>500	3	[39]
<i>Sciaenops ocellatus</i>	Fish	Growth	NOEC	>500	3	[39]
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.59	1	[40]
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	1	3	[40]
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	1.96	1	[40]
<i>Salvelinus alpinus</i>	Fish	Mortality	NOEC	14.2	4	[40]
<i>Acipenser transmontanus</i>	Fish	Mortality	NOEC	12.7	4	[40]
<i>Oncorhynchus tshawytscha</i>	Fish	Mortality	LC50	2.5	1	[41]
<i>Oncorhynchus clarkii lewisi</i>	Fish	Mortality	LC50	10	1	[41]
<i>Oncorhynchus kisutch</i> (juvenile)	Fish	Mortality	LC50	0.041	1	[42]
<i>Oncorhynchus tshawytscha</i> (juvenile)	Fish	Mortality	LC50	>67.307	1	[42]
<i>Salvelinus leucomaenis pluvius</i>	Fish	Mortality	LC50	0.51	1	[43]
<i>Salvelinus curilus</i>	Fish	Mortality	NOEC	3.8	1	[43]
<i>Oncorhynchus masou</i>	Fish	Mortality	NOEC	3.5	1	[43]
<i>Oncorhynchus kisutch</i> (Juvenile)	Fish	Mortality	LOEC	0.0514	1	[44]
<i>Oncorhynchus kisutch</i> (Juvenile)	Fish	Mortality	LC50	0.0804	1	[44]
<i>Oncorhynchus kisutch</i> (Juvenile)	Fish	Mortality	NOEC	0.025	1	[44]
<i>Oncorhynchus tshawytscha</i> (Juvenile)	Fish	Mortality	LOEC	27.3	1	[44]
<i>Oncorhynchus tshawytscha</i> (Juvenile)	Fish	Mortality	LC50	>80	1	[44]

<i>Oncorhynchus nerka</i> (Juvenile)	Fish	Mortality	NOEC	>50	1	[44]
<i>Phaeodactylum tricornutum</i>	Alga	Growth	EC50	4.072	3	[45]
<i>Phaeodactylum tricornutum</i>	Alga	Growth	LOEC	9	3	[45]
<i>Phaeodactylum tricornutum</i>	Alga	Growth	NOEC	3	3	[45]
<i>Hexagenia</i> spp. (larva)	Insect	Mortality	NOEC	232	4	[46]
<i>Daphnia magna</i> (juvenile)	Crustacean	Mortality	NOEC	42	21	[46]
<i>Planorbella pilsbryi</i> (embryos)	Mollusk	Mortality	NOEC	11.7	10	[46]
<i>Megaloniais nervosa</i>	Mollusk	Mortality	NOEC	17.9	8	[46]
<i>Brachionus koreanus</i>	Rotifer	Population	LOEC	50	7	[47]
Atlantic salmon (Alevin)	Fish	Mortality	NOEC	12.16	2	[48]
Brown trout (Alevin)	Fish	Mortality	NOEC	12.16	2	[48]
<i>Arbacia lixula</i> (Embryo)	Echinoderm	Growth	EC50	8	2	[49]
<i>Paracentrotus lividus</i> (Embryo)	Echinoderm	Growth	EC50	7	2	[49]
<i>Arbacia lixula</i> (Embryo)	Echinoderm	Growth	NOEC	1	2	[49]
<i>Paracentrotus lividus</i> (Embryo)	Echinoderm	Growth	LOEC	10	2	[49]
<i>Arbacia lixula</i> (Embryo)	Echinoderm	Growth	NOEC	1	2	[49]
<i>Paracentrotus lividus</i> (Embryo)	Echinoderm	Growth	LOEC	10	2	[49]
<i>Rhodomonas salina</i> (Vegetative cell)	Alga	Growth	EC50	>1000	2	[49]
<i>Acartia tonsa</i>	Crustacean	Mortality	EC50	>1000	2	[49]
<i>Sparus aurata</i>	Fish	Mortality	EC50	>1000	2	[49]
<i>Sparus aurata</i>	Fish	Development	EC50	>1000	2	[49]
<i>Parhyale hawaiiensis</i>	Crustacean	Mortality	LC50	>500	4	[50]
<i>Oncorhynchus clarkii clarkii</i> (Alevin)	Fish	Mortality	LC50	0.297	1	[51]
<i>Oncorhynchus clarkii clarkii</i> (Swim-up fry)	Fish	Mortality	LC50	0.0396	1	[51]
<i>Oncorhynchus clarkii clarkii</i> (5 month Parr)	Fish	Mortality	LC50	0.103	1	[51]
<i>Oncorhynchus clarkii clarkii</i> (Juvenile)	Fish	Mortality	LC50	0.1859	1	[51]
<i>Oncorhynchus clarkii clarkii</i> (Juvenile)	Fish	Mortality	LC50	0.0776	4	[51]
<i>Oncorhynchus clarkii clarkii</i> (Juvenile)	Fish	Physiology	LOEC	0.0722	0.9	[51]
<i>Oncorhynchus clarkii clarkii</i> (Juvenile)	Fish	Biochemistry	LOEC	0.1205	0.9	[51]
<i>Salvelinus fontinalis</i> (fry)	Fish	Mortality	LC50	0.08	1	[52]
<i>Salvelinus fontinalis</i> (fingerling)	Fish	Mortality	LC50	0.64	1	[52]
<i>Pimephales promelas</i> (Embryo)	Fish	Mortality	NOEC	39.97	7	[53]
<i>Pimephales promelas</i> (Adult)	Fish	Mortality	NOEC	9.4	4	[53]
<i>Pimephales promelas</i> (Embryo)	Fish	Development	NOEC	39.97	7	[53]
<i>Pimephales promelas</i> (Adult)	Fish	Biochemistry	NOEC	9.4	4	[53]
<i>Danio rerio</i> (Larvae)	Fish	Growth	LOEC	50	5	[54]
<i>Danio rerio</i> (Larvae)	Fish	Genetics	LOEC	50	5	[54]
<i>Danio rerio</i> (Larvae)	Fish	Physiology	LOEC	50	5	[54]
<i>Eisenia fetida</i>	Annelid	Mortality	LOEC	1000 µg/kg-dw soil	28	[55]
<i>Eisenia fetida</i>	Annelid	Growth	LOEC	5000 µg/kg-dw soil	28	[55]
<i>Eisenia fetida</i>	Annelid	Physiology	LOEC	100 µg/kg-dw	28	[55]
<i>Eisenia fetida</i>	Annelid	Biochemistry	LOEC	100 µg/kg-dw	28	[55]
<i>Eisenia fetida</i>	Annelid	Development	LOEC	1000 µg/kg-dw	28	[55]
<i>Eisenia fetida</i>	Annelid	Biochemistry	LOEC	100 µg/kg-dw	28	[55]
<i>Eisenia fetida</i>	Annelid	Genetics	LOEC	100 µg/kg-dw	28	[55]
<i>Eisenia fetida</i>	Annelid	Physiology	LOEC	100 µg/kg-dw	28	[55]
Rainbow trout (alevin)	Fish	Mortality	LC50	0.56	28	[56]
Rainbow trout (alevin)	Fish	Mortality	LC50	0.47	4	[56]
Rainbow trout	Fish	Mortality	LC50	0.35	4	[57]
<i>Oncorhynchus gorbuscha</i>	Fish	Mortality	NOEC	>12.8	2	[58]
<i>Salvelinus namaycush</i> (alevin)	Fish	Mortality	LC50	0.39	45	[59]
<i>Salvelinus namaycush</i> (feeding fry)	Fish	Mortality	LC50	0.5	4	[59]
Rainbow trout (Juvenile)	Fish	Biochemistry	NOEC	0.1	4	[60]
Rainbow trout (Juvenile)	Fish	Enzymes	NOEC	0.1	4	[60]
Rainbow trout (Juvenile)	Fish	Biochemistry	LOEC	0.1	4	[60]
Rainbow trout (Juvenile)	Fish	Enzymes	LOEC	0.1	4	[60]
<i>Salvelinus leucomaenis</i>	Fish	Mortality	LC50	0.8	1	ECOTOX
<i>Salvelinus leucomaenis</i>	Fish	Mortality	LC50	0.8	4	ECOTOX
<i>Oncorhynchus kisutch</i>	Fish	Cell(s)	EC50	6.3	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Cell(s)	EC50	929	1	ECOTOX
<i>Brachionus koreanus</i>	Invertebrates	Mortality	LC50	1000	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	0.64	4	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	2.08	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	0.95	2	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Mortality	LC50	0.95	3	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	1.85	0.0417	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.38	0.125	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.25	0.1667	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.28	0.1667	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.2	0.25	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.19	0.2917	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.17	1	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.16	1	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.83	0.125	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.48	1	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Mortality	LC50	0.43	1	ECOTOX

Oncorhynchus mykiss	Fish	Mortality	LC50	0.9	1	ECOTOX
Salvelinus namaycush	Fish	Mortality	LC50	0.51	1	ECOTOX
Salvelinus namaycush	Fish	Mortality	LC50	0.5	4	ECOTOX
Oncorhynchus mykiss	Fish	Cell(s)	EC50	63	1	ECOTOX
Sciaenops ocellatus (Embryo)	Fish	Growth	NOEC	442.21	3	ECOTOX
Sciaenops ocellatus (Embryo)	Fish	Morphology	NOEC	442.21	3	ECOTOX
Sciaenops ocellatus (Embryo)	Fish	Growth	NOEC	442.21	3	ECOTOX
Sciaenops ocellatus (Embryo)	Fish	Morphology	NOEC	442.21	3	ECOTOX
Sciaenops ocellatus (Embryo)	Fish	Morphology	NOEC	442.21	3	ECOTOX
Sciaenops ocellatus (Embryo)	Fish	Morphology	NOEC	442.21	3	ECOTOX
Sciaenops ocellatus (Larva)	Fish	Morphology	NOEC	449.85	3	ECOTOX
Sciaenops ocellatus (Larva)	Fish	Morphology	NOEC	449.85	3	ECOTOX
Sciaenops ocellatus (Larva)	Fish	Morphology	NOEC	449.85	3	ECOTOX
Sciaenops ocellatus (Larva)	Fish	Morphology	NOEC	449.85	3	ECOTOX
Sciaenops ocellatus (Larva)	Fish	Physiology	NOEC	449.85	3	ECOTOX
Pimephales promelas	Fish	Growth	NOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Growth	NOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Growth	NOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Morphology	NOEC	0.85	4	ECOTOX
Pimephales promelas	Fish	Morphology	LOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Biochemistry	NOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Biochemistry	NOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Genetics	LOEC	9.65	4	ECOTOX
Pimephales promelas	Fish	Genetics	LOEC	9.65	4	ECOTOX
Oncorhynchus mykiss	Fish	Enzyme(s)	LOEC	20	0.1667	ECOTOX
Parhyale hawaiiensis	Crustaceans	Genetics	LOEC	250	4	ECOTOX
Salvelinus fontinalis	Fish	Biochemistry	NOEC	0.72	1	ECOTOX
Salvelinus fontinalis	Fish	Biochemistry	LOEC	1.35	1	ECOTOX
Rhodomonas salina	Algae	Population	NOEC	1000	2	ECOTOX
Acartia tonsa	Crustaceans	Mortality	NOEC	1000	2	ECOTOX
Arbacia lixula	Invertebrates	Growth	NOEC	1	2	ECOTOX
Arbacia lixula	Invertebrates	Growth	LOEC	10	2	ECOTOX
Paracentrotus lividus	Invertebrates	Growth	NOEC	1	2	ECOTOX
Paracentrotus lividus	Invertebrates	Growth	LOEC	10	2	ECOTOX
Sparus aurata	Fish	Mortality	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Mortality	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Mortality	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Growth	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Morphology	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Physiology	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Enzyme(s)	NOEC	1000	2	ECOTOX
Sparus aurata	Fish	Enzyme(s)	NOEC	1000	2	ECOTOX
Danio rerio	Fish	Hormone(s)	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Hormone(s)	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Morphology	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Morphology	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Morphology	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Morphology	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Mortality	NOEC	10000	5	ECOTOX
Danio rerio	Fish	Growth	NOEC	2000	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Genetics	NOEC	389.2	5	ECOTOX
Danio rerio	Fish	Behavior	NOEC	2000	5	ECOTOX
Danio rerio	Fish	Physiology	NOEC	1000	5	ECOTOX

<i>Danio rerio</i>	Fish	Mortality	NOEC	54	4	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	54	4	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	50	2	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	0.05	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	4.7917	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	5	4.7638	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	4.7638	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	LOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	50	4.75	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	0.125	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	0.125	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	0.125	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	0.0971	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	7500	6	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	7500	6	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	7500	6.07	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	7500	6.07	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	7500	0.0451	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	7500	0.0451	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	500	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Hormone(s)	NOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	1000	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	50	0.5	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	2000	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Development	NOEC	0.2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	0.2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	2	1.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	2	3.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	2	5.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	2	7.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	2	2.9167	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	LOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Biochemistry	NOEC	2	3	ECOTOX
<i>Danio rerio</i>	Fish	Growth	LOEC	200	5	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Behavior	LOEC	0.2	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Behavior	LOEC	0.2	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Behavior	NOEC	0.82	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Behavior	LOEC	0.2	1	ECOTOX

<i>Oncorhynchus mykiss</i>	Fish	Hormone(s)	LOEC	0.2	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Hormone(s)	LOEC	0.2	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Biochemistry	NOEC	0.2	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Biochemistry	LOEC	0.41	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Behavior	LOEC	0.2	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Biochemistry	LOEC	0.41	1	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	NOEC	5.3	1	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	5.3	1	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	5.3	1	ECOTOX
<i>Danio rerio</i>	Fish	Enzyme(s)	LOEC	5.3	1	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	400	1	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	400	3	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	400	6	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	200	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	LOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Physiology	LOEC	50	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	LOEC	50	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Physiology	LOEC	50	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Biochemistry	LOEC	50	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Enzyme(s)	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Biochemistry	NOEC	200	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Biochemistry	LOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Biochemistry	NOEC	400	10	ECOTOX
<i>Chlorella vulgaris</i>	Fish	Population	NOEC	400	10	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Physiology	NOEC	40	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Physiology	NOEC	80	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Cell(s)	NOEC	40	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Cell(s)	LOEC	80	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Physiology	NOEC	80	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Cell(s)	NOEC	80	1	ECOTOX
<i>Oncorhynchus mykiss</i>	Fish	Physiology	NOEC	40	1	ECOTOX
<i>Brachionus koreanus</i>	Invertebrates	Population	NOEC	1000	1	ECOTOX
<i>Brachionus koreanus</i>	Invertebrates	Population	NOEC	1000	2	ECOTOX
<i>Brachionus koreanus</i>	Invertebrates	Population	NOEC	1000	3	ECOTOX
<i>Brachionus koreanus</i>	Invertebrates	Biochemistry	NOEC	1000	1	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Cell(s)	LOEC	0.5	1	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Cell(s)	NOEC	1	1	ECOTOX
<i>Salvelinus fontinalis</i>	Fish	Cell(s)	NOEC	1	1	ECOTOX
<i>Hexagenia sp.</i>	Insects	Mortality	NOEC	53.4	4	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Mortality	NOEC	42	21	ECOTOX
<i>Daphnia magna</i>	Crustaceans	Growth	NOEC	42	21	ECOTOX
<i>Planorbella pilsbryi</i>	Molluscs	Mortality	NOEC	11.7	10	ECOTOX
<i>Planorbella pilsbryi</i>	Molluscs	Mortality	NOEC	11.7	10	ECOTOX
<i>Megaloniais nervosa</i>	Molluscs	Mortality	NOEC	11.4	8	ECOTOX
<i>Megaloniais nervosa</i>	Molluscs	Mortality	NOEC	11.4	8	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	0.2	1	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	2	1	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	2	0.75	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	2	0.25	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	2	0.75	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	2	1	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	2	0.25	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	2	0.75	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	2	1	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	2	0.75	ECOTOX
<i>Salvelinus namaycush</i>	Fish	Growth	NOEC	2.1	4	ECOTOX
<i>Salvelinus namaycush</i>	Fish	Growth	NOEC	2.1	4	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	21	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	21	ECOTOX
<i>Daphnia pulex</i>	Crustaceans	Reproduction	NOEC	10	21	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	1	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	2	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	3	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Growth	NOEC	25	4.833	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	1	4.833	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	NOEC	10	4.833	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	1	4.833	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	10	4.833	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	10	4	ECOTOX

<i>Danio rerio</i>	Fish	Behavior	LOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	25	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	1	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	10	4	ECOTOX
<i>Danio rerio</i>	Fish	Physiology	LOEC	1	4.833	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	50	4	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	LOEC	50	4	ECOTOX
<i>Chlamydomonas</i>	Algae	Population	LOEC	250	3	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	NOEC	10	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	LOEC	100	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	NOEC	1	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	LOEC	10	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	LOEC	0.01	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	LOEC	0.01	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	0.01	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	0.01	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Cell(s)	NOEC	100	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	NOEC	100	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	NOEC	10	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	100	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	NOEC	10	4	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	100	4	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	NOEC	25	0.667	ECOTOX
<i>Danio rerio</i>	Fish	Behavior	LOEC	100	0.667	ECOTOX
<i>Danio rerio</i>	Fish	Development	NOEC	100	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Development	LOEC	200	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	NOEC	100	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Morphology	LOEC	200	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1200	1.667	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1200	2.667	ECOTOX
<i>Danio rerio</i>	Fish	Mortality	NOEC	1200	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	NOEC	200	2.667	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	NOEC	400	2.667	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	NOEC	100	3.667	ECOTOX
<i>Danio rerio</i>	Fish	Cell(s)	NOEC	200	3.667	ECOTOX
<i>Danio rerio</i>	Fish	Accumulation	NOEC	25	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Accumulation	NOEC	200	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Danio rerio</i>	Fish	Genetics	NOEC	400	4.667	ECOTOX
<i>Synechocystis</i> sp.	Algae	Growth	LOEC	0.1	16 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Growth	NOEC	100	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	100	16 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	0.1	16 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	0.1	16 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	LOEC	0.1	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	100	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	NOEC	0.1	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	100	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	NOEC	0.1	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	LOEC	100	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	0.1	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	LOEC	0.1	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	100	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	100	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	NOEC	100	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Biochemistry	NOEC	100	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Enzyme(s)	NOEC	100	400 Generation	ECOTOX

<i>Synechocystis</i> sp.	Algae	Enzyme(s)	NOEC	100	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	100	16 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	0.1	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	LOEC	100	240 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	NOEC	0.1	400 Generation	ECOTOX
<i>Synechocystis</i> sp.	Algae	Physiology	LOEC	100	400 Generation	ECOTOX

Generation indicates one life cycle from birth to reproductive maturity of the species tested.

Table S7. ORP of 6PPD and 6PPD-Q around the world based on mortality, growth, and biochemistry.

Endpoint	6PPD	6PPD-Q
Mortality	0%	11.43%
Growth	0.09%	4.80%
Biochemistry	0.10%	6.41%

Table S8. ORP of 6PPD-Q based on mortality, growth, and biochemical endpoints in different regions or water types. “SR”, “WE”, and “RW” refer to surface runoff, wastewater effluent, and river water, respectively.

Endpoint	Asia	Europe and North America	SR	WE	RW
Mortality	3.96%	26.15%	25.62%	0.54%	5.88%
Growth	1.26%	11.74%	11.57%	0.11%	1.93%
Biochemistry	2.98%	13.21%	12.74%	0.84%	4.39%

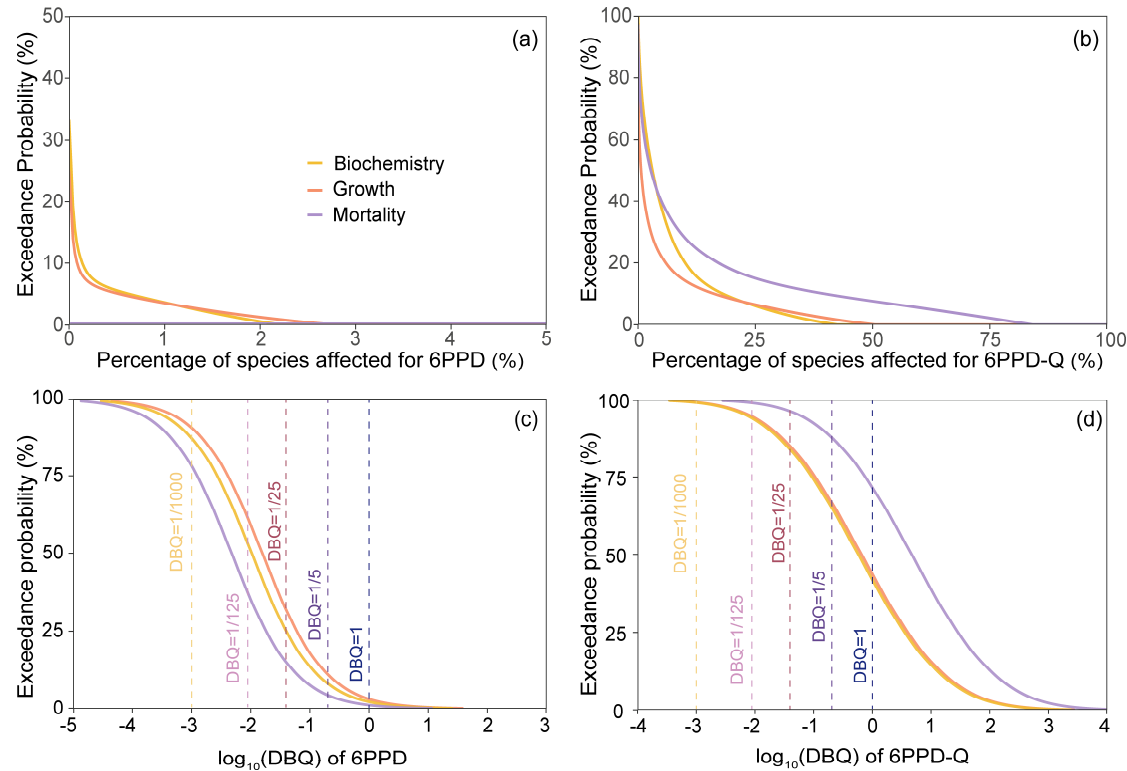


Figure S1. The joint probability curves and exceedance probability of DBQ of 6PPD and 6PPD-Q based on different endpoints.

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