Chemical Name: 2,4,6-Trichlorophenol
CAS # 88-06-2
Internal Code # ---
Developed by: Chris J. Skalski
Data Retrieval Date: 3-10-03
Fact Sheet Preparation Date: 3-01-06
Reviewed by: Bob Heitzman

ACUTE DATA

SPECIES	EC_{50}/LC_{50} (µg/l)	TEST TYPE[a]	DURATION (HOURS)	SMAV[b] (µg/l)	GMAV[b] (µg/l)	REFERENCE NUMBER
Cladoceran	3,340	F,M	48	3,340	3,340	1
Daphnia magna	2,200	S,U	48			2
	6,000	S,U	48			3
	690	S,U	48			4
	330	S,U	48			5
	270	S,U	48			5
Rainbow Trout	730	F,M	96	730	730	1
Oncorhynchus mykiss						
Bluegill	410	F,M	96	410	410	1
Lepomis macrochirus	320	S,U	96			6
Fathead Minnow	2,800	F,M	96	5,325	5,325	7
Pimephales promelas	9,700	F,M	96			8
	8,600	F,M	96			8
	2,740	F,M	96			1
	9,160	F,M	96			9
	4,550	F,M	96			10
	4,550	F,M	96			11
	600	S,M	96			14
Flagfish	2,260	R,M	96	2,207	2,207	12
Jordanella floridae	2,207	F,M	96			12
Guppy	389[c]	R,U	96	2,694	2,694	13
Poecilia reticulata	564[c]	R,U	96			13
	1,454	R,U	96			13
	4,990	R,U	96			13
Midge	>13,500	F,M	96	>13,500	>13,500	1
Tanytarsus dissimilis						
Snail	5,500	F,M	96	5,500	5,500	1
Aplexa hypnorum						

[a] S = static; F = flow through; R = renewal; U = unmeasured; M = measured.
[b] SMAV = Species Mean Acute Value; GMAV = Genus Mean Acute Value.
[c] Value not used in calculation of the SMAV since the toxicity test was conducted at a pH of 6 or less.

CHRONIC DATA

SPECIES	CHRONIC VALUE (µg/l)	METHOD	SMCV[a] (µg/l)	GMCV[a] (µg/l)	REFERENCE NUMBER
Fathead Minnow *Pimephales promelas*	530-970 717	Early Life Stage	717	717	14

[a] SMCV = Species Mean Chronic Value; GMCV = Genus Mean Chronic Value.

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CALCULATION OF ACUTE AQUATIC VALUE (AAV)[a]

Data Requirement OAC 3745-1-36(A)(1)	SPECIES	GMAV (µg/l)
(a)	Rainbow Trout	730
(b)	Bluegill	410
(c)	Guppy	2,694
(d)	*Daphnia magna*	3,340
(f)	Midge	>13,500
(g)	Snail	5,500

Secondary Acute Factor (SAF) = 5.2

Secondary Acute Value (SAV) = Lowest GMAV ÷ SAF
= 410 ÷ 5.2
= 78.8 = 79 µg/l

Tier II Acute Aquatic Value (AAV) = SAV ÷ 2
= 78.8 ÷ 2
= 39.4 = 39 µg/l

CALCULATION OF CHRONIC AQUATIC VALUE (CAV)[a]

Experimentally determined Acute-Chronic Ratios (ACRs):

SPECIES	ACUTE VALUE (µg/l)	CHRONIC VALUE (µg/l)	ACUTE-CHRONIC RATIO	SPECIES MEAN ACR
Fathead Minnow *Pimephales promelas*	9,133	717	12.74	12.74

Secondary Acute-Chronic Ratio (SACR) = $\sqrt[3]{(12.74)(18)(18)} = 16.04$

Chronic Aquatic Value (CAV) = SAV ÷ SACR
= 78.8 ÷ 18
= 4.9 µg/l

[a]See Ohio Administrative Code 3745-1-36 effective February 22, 2002.