Chemical Name: 1,2,4-Trimethylbenzene Developed by: Chris J. Skalski
CAS # 95-63-6 Data Retrieval Date: 4-24-98
Internal Code # --- Fact Sheet Preparation Date: 3-01-06

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 *Daphnia magna*	3,606	S,U	48	3,606	3,606	1
Fathead Minnow *Pimephales promelas*	7,720	F,M	96	7,720	7,720	2

[a] S = static; F = flow through; M = measured; U = unmeasured.
[b] SMAV = Species Mean Acute Value; GMAV = Genus Mean Acute Value.

CHRONIC DATA

SPECIES	CHRONIC VALUE (µg/l)	METHOD	SMCV[a] (µg/l)	GMCV[a] (µg/l)	REFERENCE NUMBER

None Available

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

REFERENCES

1. Bobra, A.M., W.Y. Shiu and D. MacKay. 1983. A Predictive Correlation for *the Acute To*xicity of Hydrocarbons and Chlorinated Hydrocarbons to the Water Flea (*Daphnia magna*). Chemosphere 12(9-10):1121-1129.

2. Geiger, D.L., S.H. Poirier, L.T. Brooke and D.J. Call. 1986. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Vol. 3. Center for Lake Superior Environmental Studies, Univ. of Wisconsin, Superior, WI:328 p.

CALCULATION OF ACUTE AQUATIC VALUE (AAV)[a]

Data Requirement OAC 3745-1-36(A)(1)	SPECIES	GMAV (µg/l)
(b)	Fathead Minnow	7,720
(d)	*Daphnia magna*	3,606

Secondary Acute Factor (SAF) = 13.0

Secondary Acute Value (SAV) = Lowest GMAV ÷ SAF
= 3,606 ÷ 13.0
= 277 = 280 µg/l

Tier II Acute Aquatic Value (AAV) = SAV ÷ 2
= 277 ÷ 2
= 139 = 140 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
None Available				

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

Chronic Aquatic Value (CAV) = SAV ÷ SACR
= 277 ÷ 18
= 15 µg/l

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