Chemical Name: Vinyl Chloride Developed by: Chris J. Skalski
CAS # 75-01-4 Data Retrieval Date: 11-03-00
Internal Code # 125 Fact Sheet Preparation Date: 3-01-06

ACUTE DATA

SPECIES	EC_{50}/LC_{50} (µg/l)	TEST TYPE[a]	DURATION (HOURS)	SMAV[b] (ug/l)	GMAV[b] (ug/l)	REFERENCE NUMBER
Cladoceran *Daphnia magna*	521,000	S,U	48	521,000	521,000	1
Fathead Minnow *Pimephales promelas*	218,000	S,U	96	218,000	218,000	1

[a] S = static; 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. RMT, Inc. 2000. Findings of the Toxicity Testing for Vinyl Chloride Conducted as Part of the Situation-Specific Response Plan for ACL Exceedences in Ground Water.

CALCULATION OF ACUTE AQUATIC VALUE (AAV)[a]

Data Requirement OAC 3745-1-36(A)(1)	SPECIES	GMAV (µg/l)
(c)	Fathead Minnow	521,000
(d)	*Daphnia magna*	218,000

Secondary Acute Factor (SAF) = 13.0

Secondary Acute Value (SAV) = Lowest GMAV ÷ SAF
= 218,000 ÷ 13.0
= 16,769 = 17,000 ug/l

Tier II Acute Aquatic Value (AAV) = SAV ÷ 2
= 16,769 ÷ 2
= 8,385 = 8,400 ug/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
= 16,769 ÷ 18
= 932 = 930 ug/l

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