

## OHIO EPA SURFACE WATER QUALITY CRITERION FACT SHEET

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Chemical Name: n-Butylbenzene      Developed by: Chris J. SkalskiCAS # 104-51-8      Data Retrieval Date: 6-20-01Internal Code # --      Fact Sheet Preparation Date: 5-16-06Reviewed by: Bob HeitzmanACUTE DATA

<u>SPECIES</u>	<u>EC<sub>50</sub>/LC<sub>50</sub></u> <u>(µg/l)</u>	<u>TEST TYPE<sup>a</sup></u>	<u>DURATION</u> <u>(HOURS)</u>	<u>SMAV<sup>b</sup></u> <u>(µg/l)</u>	<u>GMAV<sup>b</sup></u> <u>(µg/l)</u>	<u>REFERENCE</u> <u>NUMBER</u>
Cladoceran	340 <sup>c</sup>	S,M	48			1
<i>Daphnia magna</i>	380 <sup>c</sup>	S,M	48			
	380 <sup>c</sup>	S,M	48			
	450 <sup>c</sup>	S,M	48			

<sup>a</sup> S = static; U = unmeasured; F = Flow-through; R = Renewal; M = Measured.

<sup>b</sup> SMAV = Species Mean Acute Value; GMAV = Genus Mean Acute Value.

<sup>c</sup> Data not used to calculate a SMAV since the test organisms were fed.

CHRONIC DATA

<u>SPECIES</u>	<u>CHRONIC VALUE</u> <u>(µg/l)</u>	<u>METHOD</u>	<u>SMCV<sup>a</sup></u> <u>(µg/l)</u>	<u>GMCV<sup>a</sup></u> <u>(µg/l)</u>	<u>REFERENCE</u> <u>NUMBER</u>
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No Chronic Data Available

<sup>a</sup> SMCV = Species Mean Chronic Value; GMCV = Genus Mean Chronic Value.

REFERENCES

- Vigano, L. 1993. Reproductive Strategy of *Daphnia magna* and Toxicity of Organic Compounds. Water Res. 27(5):903-909.

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## CALCULATION OF ACUTE AQUATIC VALUE (AAV)<sup>a</sup>

Data Requirement <u>OAC 3745-1-36(A)(1)</u>	<u>SPECIES</u>	GMAV <u>(µg/l)</u>
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Secondary Acute Factor (SAF) =

Screening Secondary Acute Value (SAV) = Lowest GMAV ÷ SAF

= Insufficient data available

Screening Acute Aquatic Value (AAV) = SAV ÷ 2

= insufficient data available

## CALCULATION OF CHRONIC AQUATIC VALUE (CAV)<sup>a</sup>

Experimentally determined Acute-Chronic Ratios (ACRs):

<u>SPECIES</u>	<u>ACUTE VALUE</u> <u>(µg/l)</u>	<u>CHRONIC VALUE</u> <u>(µg/l)</u>	<u>ACUTE-CHRONIC</u> <u>RATIO</u>	<u>SPECIES MEAN</u> <u>ACR</u>
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No Experimentally-Derived ACRs Available

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

Screening Chronic Aquatic Value (CAV) = SAV ÷ SACR

= Insufficient data available

<sup>a</sup>See Ohio Administrative Code 3745-1-36 effective February 22, 2002.