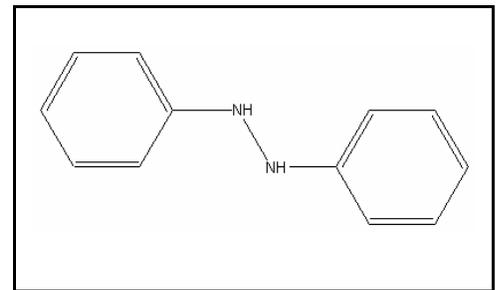




## TIER II ACUTE AND CHRONIC AQUATIC LIFE VALUES

### 1,2-DIPHENYLHYDRAZINE

CAS RN: 122-66-7  
Water Solubility: 68 mg/L  
Log  $K_{ow}$ : 2.97<sup>P</sup>



#### Standard

The procedures described in the Tier II methodology indicate that, except possibly where a locally important species is very sensitive, aquatic organisms should not be affected unacceptably if the four (4) day average concentration of 1,2-diphenylhydrazine does not exceed 1.1  $\mu\text{g/L}$  more than once every three (3) years on the average and if the one (1) hour average concentration does not exceed 9.6  $\mu\text{g/L}$  more than once every three (3) years on the average.

#### Calculations

##### Acute Aquatic Life:

$$\text{SAV} = \text{lowest GMAV/SAF}$$

$$\begin{aligned}\text{Lowest GMAV} &= 250 \mu\text{g/L} \\ \text{SAF} &= 13.0\end{aligned}$$

$$\text{SAV} = 250/13.0 = 19.23 \mu\text{g/L}$$

$$\text{SMC} = \text{SAV}/2 = 19.23/2 = \mathbf{9.6 \mu\text{g/L}}$$

##### Chronic Aquatic Life:

$$SCV = SAV/SACR$$

$$SACR = 18$$

$$SCV = 19.23/18 = 1.1 \mu\text{g/L}$$

## Data

Table 1. GMAVs and SMAVs for 1,2-diphenylhydrazene

<u>Genus Mean Acute Value (<math>\mu\text{g/L}</math>)</u>	<u>Species</u>	<u>Species Mean Acute Value (<math>\mu\text{g/L}</math>)</u>	<u>Acute- Chronic Ratio</u>	<u>Reference Number</u>
250	Bluegill <u>Lepomis macrochirus</u>	250		1
4,100	Cladoceran <u>Daphnia magna</u>	4,100		2

## References

1. Buccafusco, R.J., S.J. Ells, and G.A. LeBlanc 1981. Acute toxicity of priority pollutants to bluegill (Lepomis macrochirus). Bull. Environ. Contam. Toxicol. 24(5): 446-452.
2. LeBlanc, G.A. 1980. Acute toxicity of priority pollutants to Daphnia magna. Bull. Environ. Contam. Toxicol. 24(5): 684-691.

## Acronyms/Abbreviations

CAS RN	Chemical Abstract Service Registry Number
K <sub>ow</sub>	Octanol-Water Partition Coefficient
P (superscript)	Predicted value
SAV	Secondary Acute Value
GMAV	Genus Mean Acute Value
SAF	Secondary Acute Factor
SMC	Secondary Maximum Concentration
SCC	Secondary Continuous Concentration
SACR	Secondary Acute-Chronic Ratio
FT	Flow-through
S	Static
U	Unmeasured
M	Measured
EVISTRA	Evaluation and Interpretation of Suitable Test Results in AQUIRE (EPA quality checking method/database)

## Revision History

June 22, 1999            Values first developed  
April 25, 2001        New search for data. No new studies added.

## Contact Information

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