### Rule 57 Aquatic Values Data Sheet

**Chemical name:** Hydrazine  
**CAS #:** 302-01-2  

**Species**  
- Water flea  
  \( \text{(Daphnia magna)} \)  
- Water flea  
  \( \text{(Daphnia pulex)} \)  
- Amphipod  
  \( \text{(Gammarus pseudolimnaeus)} \)  
- Channel catfish  
  \( \text{(Ictalurus punctatus)} \)  
- Golden shiner  
  \( \text{(Notemigonus crysoleucas)} \)  
- Bluegill  
  \( \text{(Lepomis macrochirus)} \)  
- Guppy  
  \( \text{(Lebistes reticulatus)} \)  

**Test type**  
- EC50  
- LC50

**Duration (hours):**  
- 48  
- 96

**Test conditions (FT,M, etc.):**  
- FT,M  
- SR,M  
- S,M

**Hardness (mg/L):**  
- 50.3  
- NA  
- 106-113  
- 140-173  
- 160-190  
- 20-25  
- 400-500

**Chemical (ug/L):**  
- 280  
- 190  
- 160  
- 700  
- 1,000  
- 1,120  
- 1,600  
- 610  
- 3,850

**LC50/EC50 (ug/L):**  
- 280  
- 190  
- 160  
- 700  
- 1,000  
- 1,120  
- 1,600  
- 610  
- 3,850

**SMAV (ug/L):**  
- 221  
- 174  
- 160  
- 700  
- 1,000  
- 1,243  
- 1,243  
- 1,532  
- 1,532

**GMAV (ug/L):**  
- 1,243  
- 1,243  
- 1,243  
- 1,532  
- 1,532

**Rank:**  
- 1  
- 2  
- 2  
- 2  
- 3  
- 4  
- 5  
- 6

**Reference:**  
- 1  
- 2  
- 2  
- 1  
- 6  
- 6  
- 3  
- 3  
- 3  
- 4  
- 5

**Acute CF:** ----  
**Chronic CF:** ----  

**Developed by:** D. Bush  
**Approved by:**  
**Approval date:** 1/2/12  
**Literature search date:** 1/19/2012  

**FAV:** 32 ug/L  
**AMV:** 16 ug/L  
**FCV:** 1.8 ug/L
Fathead minnow  
(*Pimephales promelas*)

<table>
<thead>
<tr>
<th>Species</th>
<th>Test type</th>
<th>Duration</th>
<th>Conditions</th>
<th>Hardness</th>
<th>Chemical</th>
<th>MATC</th>
<th>SMCV</th>
<th>GMCV</th>
<th>Rank</th>
<th>Reference</th>
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</table>

*value not used because FT,M tests take precedence over S, M tests.*

**CHRONIC DATA**

No Suitable Data Were Found.
References:


Reviewed, but not used:


Rule 57 Aquatic Values Work Sheet

*Chemical Name:* Hydrazine  
*C.A.S. #:* 302-01-2

**AQUATIC MAXIMUM VALUE CALCULATIONS**

A. Minimum 8 species requirement is **not** met. Minimum requirements met = 4 (ii, iii, iv, v)  
Minimum requirements missing for Tier I = 4 (i, vi, vii, viii)  
Acute factor = 7

1. Toxicity is **not** dependent on a water characteristic  
   a. FAV calculation: 221 ug/L/7 = 31.57 ug/L = 32 ug/L

2. Toxicity is dependent on a water characteristic  
   a. **Slope = (Table__)**
   
   b. FAV equation:

3. Go to C.

B. Minimum 8 species requirement is **met** (Tier I)

1. Toxicity is **not** dependent on a water characteristic  
   a. FAV calculation: Att.___

2. Toxicity is **dependent** on a water characteristic  
   a. **Slope = (Table__)**
   
   b. Ranked genus mean acute intercepts: Table
   
   c. Final acute intercept = (Att. __)
   
   In of final acute intercept =
   
   d. FAV equation =

C. Aquatic Maximum Value (AMV) calculation: (221 ug/L/7)/2 = 15.79 ug/L = 16 ug/L
FINAL CHRONIC VALUE CALCULATIONS

A. Minimum 8 species requirement is not met (Tier II). Minimum requirements met = 0
   Minimum requirements missing for Tier I = 8

1. Acute to chronic ratio
   a. Number ACRs meeting minimum data requirements = 0 (Table ___)
   b. Acute to chronic ratio = 18

2. Toxicity is not dependent on a water characteristic
   FCV = \( \frac{(221 \text{ ug/L})/18}{1} = 1.75 \text{ ug/L} = 1.8 \text{ ug/L} \)

3. Toxicity is dependent on a water characteristic
   a. Slope =  
      (Table ___)
   b. Aquatic chronic intercept =  
      (Table ___)
      \[ \ln \text{ of aquatic chronic intercept} = \]
   c. FCV equation =

B. Minimum 8 species requirement is met (Tier I)

1. Toxicity is not dependent on a water characteristic
   a. FCV = __  (Att. ___)

2. Toxicity is dependent on a water characteristic
   a. Slope = 
      (Table ___)
   b. Ranked genus mean chronic intercepts: Table ___
   c. Final chronic intercept = ____ (Att. ___); \ln \text{ of final chronic intercept} =
   d. FCV equation =