

(9-21-82)

DATA EVALUATION RECORD

1. CHEMICAL: Cyromazine  
(N-Cyclopropyl-1,3,5-triazine-2,4,6-triamine)
2. FORMULATION: Technical  
95% a.i.
3. CITATION: Schupner, J.K., A.G. Vilkas, and B.J. Buck. 1981.  
The acute toxicity of CGA-72662 (Technical Grade)  
to the Bluegill Sunfish. Prepared by Union Carbide -  
Environmental Services. Submitted by CIBA-GEIGY,  
Greensboro, N.C. for Reg. No.100-AGE under  
Accession No. 070912.
4. REVIEWED BY: John Bascietto  
Wildlife Biologist  
EEB/HED
5. DATE REVIEWED: 9/21/82
6. TEST TYPE: 96-hr. LC<sub>50</sub> - freshwater fish  
  
A. Test Species - Bluegill Sunfish,  
Lepomis macrochirus
7. REPORTED RESULTS:  
  
No observable effect level = 89.7 mg/l. A 96-hr LC<sub>50</sub> and  
95% c.i. could not be determined due to lack of mortality  
at all exposure times and levels up to 89.7 mg/l.
8. REVIEWER'S CONCLUSION  
  
By implication the 96-hr LC<sub>50</sub> is greater than 89.7 mg/l  
analytical, (100 mg/l nominal). The study is scientifically  
sound and fulfills the intent of the (proposed) Registration  
Guidelines. With a 96 hr LC<sub>5</sub> > 89.7 mg/l (analytical) (100  
mg/l nominal) CGA-72662 is slightly to practically non-toxic  
to warmwater fish species, Lepomis macrochirus.

9. Materials/Methods

- A. Test Procedures - procedures used for the range - finder and definitive LC<sub>50</sub> tests were those recommended by the protocols of the (proposed) Registration guidelines
- B. Statistical Analysis - No 96-hr LC<sub>50</sub> nor 95% c.i. were calculated from a statistical analysis, since there was insufficient % mortality at all does at 96 hours.

10. Results -Mortality

| <u>Range - Finder</u> |             |                         |
|-----------------------|-------------|-------------------------|
| (nominal)             | Dose (mg/l) | % Mortality at 96 hours |
|                       | 1           | 0                       |
|                       | 5           | 0                       |
|                       | 10          | 0                       |
|                       | 50          | 0                       |
|                       | 100         | 0                       |
|                       | 0 (Control) | 0                       |

Definitive

| Dose (mg/l)   | % Mortality at 96 hours |
|---------------|-------------------------|
| (Analytical)  |                         |
| 9.0           | 0                       |
| 16.0          | 0                       |
| 29.1          | 0                       |
| 50.0          | 0                       |
| 89.7          | 0                       |
| 0.0 (control) | 0                       |

## Chemistry -

Dilution water prior to test

| <u>Temp</u>       | <u>pH</u> | <u>Conductivity</u> | <u>Hardness*</u> | <u>Alkalinity*</u> |
|-------------------|-----------|---------------------|------------------|--------------------|
| 21.4-2.15<br>(°C) | 7.56      | 140 umhos/cm        | 44 mg/l          | 30 mg/l            |

\*as Ca CO<sub>3</sub>Test water - Control

|         | <u>D.O.</u> | <u>pH</u> |
|---------|-------------|-----------|
| - 0 hr. | 8.9 mg/l    | - 7.66    |
| 24 "    | 7.9 "       | 7.35      |
| 48 "    | 7.4 "       | 7.31      |
| 72 "    | 7.2 "       | 7.30      |
| 96 "    | 6.9 "       | 7.32      |

# 11. Reviewer's Evaluation

A. Test Procedures-all procedures were within acceptable limits of the recommended protocols for a 96-hr LC<sub>50</sub> for a warmwater fish species.

B. Statistical Analysis - none performed.

C. Results - Since the range finder employed nominal concentrations of up to 100 mg/l and since no mortality resulted in that test nor during the definitive study, the 96-LC<sub>50</sub> is, by implication, greater than 100 mg/l.

It is not, however, clear why the same (nominal) concentrations were tested in the definitive test as were used in the range-finder, since the latter found no mortality at 100 mg/l. The definitive test or a second range-finder should have started testing at 100 mg/l and test sequentially greater concentrations in order to determine an LC<sub>50</sub>. The exact repetition of range-finder doses in definitive testing is inappropriate and discouraged.

## D. Conclusions

1. Category: Core

2. Repair: N/A

3. Rationale: Guidelines Study