

(9/22/82)

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 Rainbow Trout. 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
EER/HED
5. DATE REVIEWED: 9/22/82
6. TEST TYPE: 96-hr. LC₅₀ - freshwater fish

A. Test Species - Rainbow Trout
Salmo gairdneri

7. REPORTED RESULTS:

No observable effect level = 50.8 mg/l. A 96-hr LC₅₀ 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

Since a range-finder test employed nominal doses of up to 100 mg/l and since no mortality occurred in that test nor in the definitive test at up to 87.9 mg/l (analytical) the 96-hr LC₅₀ is, by implication, greater than 100 mg/l.

The study is scientifically sound, and shows that CGA-72662 is slightly to practically non-toxic to a coldwater fish species. The study fulfills the intent of the (proposed) Registration guidelines.

9. Materials/Methods

- A. Test Procedures - procedures for both the range-finder and definitive studies were those recommended by the protocols of the (proposed) Registration guidelines.
- B. Statistical Analysis - No 96-hr LC₅₀ nor 95% c.i. were calculated from a statistical analysis, because there was no mortality

10. ResultsMortality -Range Finder

<u>Dose (mg/l)</u> (Nominal)	<u>% mortality at 96 hours</u>
0 (control)	0
1	0
5	0
10	0
50	0
100	0

Definitive

<u>Dose (mg/l)</u> (analytical)	<u>% mortality at 96 hours</u>
0 (control)	0
11.8	0
17.1	0
28.6	0
50.8	0
87.9	0

CHEMISTRY -Dilution H₂O prior to test

<u>Temp (°C)</u>	<u>pH</u>	<u>Conductivity</u> (umhos/cm)	<u>Hardness*</u>	<u>Alkalinity*</u>
11.6-12.5	7.56	140	44	30

* as CaCO₃

<u>Test water - control</u>	<u>D.O. (mg/l)</u>	<u>pH</u>
0 HR	10.0	7.60
24 "	8.7	7.28
48 "	8.7	7.30
72 "	8.8	7.31
96 "	8.9	7.29

11. Reviewer's Evaluation

- A. Test Procedures - all procedures were within acceptable limits of the recommended protocols for a 96-hr. LC₅₀ for a coldwater fish species.
- B. Statistical Analysis - none performed
- C. Results - Since the range-finder employed nominal doses of up to 100 mg/l and since no mortalities resulted in that test nor in the definitive study, the 96-hr LC₅₀ is, by implication, greater than 100 mg/l.

It is not, however, clear as to why the same nominal concentrations were tested in both the range-finder and definitive studies, since the range-finder found no mortality at the highest level tested, i.e., 100 mg/l. It therefore makes little sense to run the definitive studies at the same nominal concentrations, as they already knew the results. The definitive studies should have started at 100 mg/l and tested sequentially greater concentrations or a new range-finder should have been done, starting with 100 mg/l. The doses tested here are inappropriate for establishing an actual LC₅₀.

D. Conclusions

- 1. Category: Core
- 2. Repair - N/A
- 3. Rationale: Guidelines Study