

US EPA ARCHIVE DOCUMENT

DATA EVALUATION RECORD



2000941

MRID 00160453

1. Chemical: Amitrole
2. Test Material: 96.5% (technical ai), a white powder
3. Study Type: 96-hour LC₅₀

Species Tested: Bluegill Sunfish

4. Study ID: McAllister, W.A. (1985) Acute Toxicity of Aminotriazole to Bluegill Sunfish (Lepomis Macrochirus); Report No. 33716; prepared by Analytical Bio-Chemistry Laboratories, Inc. for Union Carbide, P.O. Box 12014, Research Triangle Park, North Carolina 27709; Accession No. 263211.

5. Reviewed by: Curtis E. Laird
Fishery Biologist
EEB/HED

Signature: *Curtis E. Laird*

Date: 9-23-86

6. Approved by: Norman Cook
Supervisory Biologist
EEB/HED

Signature: *Norman Cook*

Date: 9-24-86

7. Conclusions:

This study indicates Amitrole is practically nontoxic to bluegill sunfish with an LC₅₀ greater than 1000 ppm. This study does fulfill the requirement in support of registration for a warmwater fish study.

8. Recommendations: N/A.

9. Background:

EEB requested this study in order to fulfill the data gap in the reregistration process.

10. Discussion of Individual Test: N/A.

11. Materials and Methods:

- a. Test Animals: Bluegill sunfish Lepomis macrochirus from Osage Cafisheries, Osage Beach, MO; Mean weight 0.21 g, mean standard length of 21 ± 1.1 mm.
- b. Test System: Five (5) gallon glass/15 L of test solution; static exposure to water at 22 °C; 96 hours duration.
- c. Dose: Static bioassay using nominal concentration; no solvent used.
- d. Design: Ten fish per level; five dose levels plus control (0, 62.5, 125, 250, 500, and 1000 ppm).
- e. Statistics: Stephan's et al. 1978 computer program for calculating LC₅₀. No statistics were performed due to lack of mortality.

12. Reported Results:

The 24-, 48-, and 96-hour LC₅₀ values were determined to be greater than 1000 mg/L. The 96-hour no-observed-effect concentration was estimated to be greater than 1000 mg/L, which was based on the lack of mortality and abnormal effects at the highest concentration tested.

13. Study Author's Conclusions:

The 24-, 48-, and 96-hour LC₅₀ values for Aminotriazole were all > 1000 mg/L. All results were based on the nominal concentrations of 62.5, 125, 250, 500, and 1000 mg/L. The 96-hour no-observed effect concentration was estimated to be 1000 mg/L, the highest concentration tested, based on the lack of mortality or observed abnormal effects.

14. Reviewer's Discussion and Interpretation of the Study

- a. Test Procedures: The test procedure complied with the recommended EPA Protocol of October 1982.
- b. Statistical Analysis: No statistics were performed due to lack of mortality.
- c. Discussion/Results: With a 96-hour LC₅₀ > 1000 ppm, Amitrole 96.5% ai is practically nontoxic to bluegill sunfish.

d. Adequacy of Study:

1. Category: Core.
2. Rationale: N/A.
3. Reparability: N/A.

15. Completion of One-Liner: Yes.

16. CBI Appendix: N/A.