

1. Chemical : Omadine Sodium
2. Formulation : Sodium Omadine..... 6.4%
Hexadro-1,3,5-Tris(2 Hydroethyl)-S-trizine..63.6%
70%
3. Citation : LeBlanc, G.; Souse, J. (1982) Acute Toxicity of Triadine 10 To Bluegill (Lepomis macrochirus); Report # BW-82-2-1119; Prepared by EG&G Bionomics for the Olin Corporation, New Haven, Connecticut.

4. Reviewed By :

Curtis E. Laird
Fishery Biologist
EEB/HED

Signature: Curtis E. Laird
Date: 7-5-85

5. Date Reviewed : 7-28-82

6. Test Type : 96-hour LC₅₀

A. Test Species : Bluegill sunfish

7. Reported Results : The 96-hour LC₅₀ (and 95% confidence interval) for bluegill exposed to Triadine 10, estimated by the moving average angle method was 77(60-100) ppm.

8. Reviewer's Conclusions :

This study indicates Omadine Sodium is slightly toxic to bluegill with an LC₅₀ of 77 ppm. The study does not fulfill the requirement in support of registration because a formulated product was used and a mixture of two active ingredients, dissolved oxygen dropped to 1.7 ppm at the 36 ppm concentration and the control dissolved oxygen was 3.7 ppm after 96-hour of exposure.

9. Material/Methods :

A. Test Procedure :

The test procedure did not comply with the recommended EPA protocol of October 1982 (Part 158).

B. Statistical Analysis : Stephan's 1978

C. Discussion/Results : The 96-hour LC₅₀ value is 77 ppm.

10. Reviewer's Evaluation

A. Test Procedure :

The test procedure did not comply with the recommended EPA protocol of October 1982 (Part 158) for the following reasons:

- a. a formulated product was used and mixture of two active ingredients;
- b. # of fish/dosage is unknown; *RND*
- c. D.O in control and 36 ppm concentration dropped below 40%.

B. Statistical Analysis :

The biomomial test shows the 96-hour LC₅₀ to be 77 ppm.

C. Conclusions :

1. Category : Supplemental
2. Rationale : See test procedure above
3. Repairability : This study cannot be upgraded to core

LAIRD OMADINE-SODIUM 96-HOUR LC50 BLUEGILL SUNFISH 00105191

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB.(PERCENT)
280	10	10	100	.0976563
170	10	10	100	.0976563
100	10	10	100	.0976563
60	10	0	0	.0976563
36	10	0	0	.0976563

THE BINOMIAL TEST SHOWS THAT 60 AND 100 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS, BECAUSE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS GREATER THAN 95 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 77.4597

WHEN THERE ARE LESS THAN TWO CONCENTRATIONS AT WHICH THE PERCENT DEAD IS BETWEEN 0 AND 100, NEITHER THE MOVING AVERAGE NOR THE PROBIT METHOD CAN GIVE ANY STATISTICALLY SOUND RESULTS.
