

- 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.; Surprenant, D. (1982) Acute Toxicity of Triadine 10 To The Water Flea (Daphnia magna); Report # BW-82-2-1122; 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 : 7-28-83

6. Test Type : 48-hour LC₅₀

A. Test Species : Daphnia magna

7. Reported Results : The 48-hour LC₅₀ and 95% confidence interval for the water flea exposed to Triadine 10, estimated by the moving average angle method was 5.4(3.6-9.4) ppm.

8. Reviewer's Conclusions :

This study indicates Omadine Sodium is moderately toxic to dahnia with an LC₅₀ value of 5.2 ppm. The study does not fulfill the requirement in support of regsitration because a formulated product was used instead of technical grade ai and a mixture of two active ingredients.

9. Material/Methods :

A. Test Procedure :

The test procedure complied with the recommended EPA protocol of October 1982 (Part 158) except the % a.i. and a mixture of two active ingredients.

B. Statistical Analysis : Stephan's 1978.

C. Discussion/Results : The 96-hour LC₅₀ value is 5.2 ppm.



10. Reviewer's Evaluation

A. Test Procedure :

The test procedure complied with the recommended EPA protocol of October 1982 (Part 158) except a formulated product was used and a mixture of two active ingredients.

B. Statistical Analysis :

Probit method showed the 96-hour LC₅₀ to be 5.2 ppm.

C. Conclusions :

1. Category : Supplemental
2. Rationale : See test procedure above.
3. Repairability : This study is not repairable •

LAIRD OMADINE-SODIUM 48-HOUR LC50 DAPHNIA MAGNA 00105192

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB.(PERCENT)
10	15	11	73.3333	5.92346
6	15	5	33.3333	15.0879
3.6	15	8	53.3333	50
2.2	15	3	20	1.75781
1.3	15	4	26.6667	5.92346
.8	15	2	13.3333	.369262
.5	15	0	0	3.05176E-03
.3	15	0	0	3.05176E-03
.18	15	0	0	3.05176E-03

THE BINOMIAL TEST SHOWS THAT .8 AND +INFINITY 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 5.20697

RESULTS CALCULATED USING THE MOVING AVERAGE METHOD

SPAN	G	LC50	95 PERCENT CONFIDENCE LIMITS	
3	.450704	5.45284	3.5949	10.7492

RESULTS CALCULATED USING THE PROBIT METHOD

ITERATIONS	G	H	GOODNESS OF FIT PROBABILITY
5	.130111	1	.406699

SLOPE = 1.67104
 95 PERCENT CONFIDENCE LIMITS = 1.06828 AND 2.2738

LC50 = 5.22586
 95 PERCENT CONFIDENCE LIMITS = 3.54661 AND 9.47417

LC10 = .908137
 95 PERCENT CONFIDENCE LIMITS = .428797 AND 1.40197
