1. Chemical: Omadine Sodium

3. Citation : LeBlanc, G.; Souse, J. (1982) Acute Toxicity of Triadine 10 To Channel Catfish (Ictalurus punctatus); Report # BW-82-2-1120; Prepared by EG&G Bionomics for the Olin Corporation, New Haven, Connecticut.

4. Reviewed By:

Curtis E. Laird Fishery Biologist EEB/HED Signature: Curtin To. Lain

Date: 7-575

5. Date Reviewed: 7-27-83

6. Test Type: 96-hour LC50

A. Test Species: Channel Catfish

7. Reported Results: The 96-hour LC $_{50}$  (and 95% confidence interval) for channel catfish exposed to Triadine 10, estimated by binomial probability, was 36(28-46) ppm.

8. Reviewer's Conclusions:

This study indicates Omadine Sodium is slightly toxic to channel catfish with an  $\rm LC_{50}$  value of 36 ppm. The study does not fulfill the requirement in support of regsitration because a formulated product was used and a mixture of two active ingredients.

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/Resutls: The 96-hour LC50 value is 36 ppm.

## 10. Reviewer's Evaluation

## A. Test Procedure:

The test procedure did not comply with the recommended EPA protocol of October 1982 (Part 158) because a formulated product was used and a mixture of two active ingredients.

## B. Statistical Analysis:

The binomial test shows the 96-hour  $\mbox{LC}_{50}$  to be 36 ppm. See attached sheet.

## C. Conclusions:

- 1. Category : Supplemental
- 2. Rationale : See test procedure above
- 3. Repairability: Not repairable to core

LAIRD OMADINE SODIUM 96-HOUR LC50 CHANNEL CATFISH 00105189

|       |         | , .,   |         | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
|-------|---------|--------|---------|---|
| CONC. | NUMBER  | NUMBER | PERCENT | BINOMIAL                                |
|       | EXPOSED | DEAD   | DEAD    | PROB. (PERCENT)                         |
| 46    | 10      | 10     | 100     | .0976563                                |
| 28    | 10      | 0      | 0       | .0976563                                |
| 17    | 10      | 0      | 0       | .0976563                                |
| 10    | 10      | 1      | 10      | 1.07422                                 |
| 6     | 10      | 0 * '  | 0       | .0976563                                |

THE BINOMIAL TEST SHOWS THAT 28 AND 46 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 35.8887

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.

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