

US EPA ARCHIVE DOCUMENT

DATA EVALUATION RECORD

7-28-87

1. Chemical: Iprodione (Rovral) Sha. No: 109801
2. Test Material: 95% ai
3. Study Type: Fish 96-hour LC50

Species Tested: Catfish (Ictalurus punctatus)

4. Study ID: Swigert, James P., Brenda B. Franklin, Alan Seidel, and Craig Lindel, Acute Flow-Through Toxicity of Iprodione Technical to Channel Catfish (Ictalurus punctatus); prepared by Analytical Bio-chemistry Laboratories, Inc. (July 17, 1986); submitted by Rhone-Poulenc, Inc.; Study No. 34385; Acc. No. 264233.

5. Reviewed By:

Daniel D. Rieder
Wildlife Biologist
EEB/HED

Signature: Daniel D. Rieder

Date: 7-27-87

6. Approved By:

Allen W. Vaughn, Acting
Head-Section II
EEB/HED

Signature: Allen W. Vaughn

Date: 7-28-87

7. Conclusions: This study is scientifically sound. 96-hour LC50 = 3.06 ppm. 95 Confidence Limits = 2.1 - 4.2 ppm. This study will fulfill the guideline requirement for a fish acute 96-hour LC50.
8. Recommendations: N/A
9. Background: This study was submitted to support registration.
10. Discussion of Individual Test: N/A
11. Materials and Methods

Test Material: Iprodione
Percent active Ingredient: 95%

Test Organism: Catfish
Species: Ictalurus punctatus
Acclimation: 14 days,
0 hrs. without
Number/concentration: 20

Weight \bar{x} = 0.094g
Length: \bar{x} = 23 mm
Source: Louisiana State
University
No./levels: 20
Loading factor: 0.06 g/liter

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Test Containers: glass
Size: 30 liters
Aerated: No

Replicates: 1

Test Conditions: flowthrough
Photoperiod: 16 hrs./day
Temperature: 22° + 1°C
Controls: solvent
Way test was begun: fish
added after Iprodione

Solvent: Acetone
Test solution: aerated well water
References: Methods of Acute
Toxicity Testing with Fish,
Macroinvertebrates, and
Amphibians

Statistics: Binomial

12. Reported Results:

96-hour LC50 = 3.1 ppm (measured). 95% C.L. = 2.6 - 3.6 ppm.

CONCENTRATION (PPM) Measured	MORTALITY % 96-hours
Solvent	0
0.22	0
0.52	0
0.96	0
2.1	5
4.2	90

13. Study Author's Conclusions/Q.A. Measures:

The LC50 of Iprodione to catfish is 3.1 ppm.

14. Reviewer's Discussion and Interpretation of the Study

A. Test Procedures: The procedure is acceptable.

B. Statistical Analysis: Independent statistical analysis confirmed the reported LC50.

C. Discussion/Results: Iprodione is moderately toxic to catfish with a LC50 of 3.06 ppm, 95% C.L. 2.1 - 4.2 ppm.

D. Adequacy of Study: Core

15. Completion of One-Liner: One liner completed

16. CBI Appendix: N/A

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CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
4.2	20	18	90	2.012253E-02
2.1	20	1	5	2.002716E-03
.96	20	0	0	9.536742E-05
.52	20	0	0	9.536742E-05
.22	20	0	0	9.536742E-05

THE BINOMIAL TEST SHOWS THAT 2.1 AND 4.2 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 3.061726

RESULTS CALCULATED USING THE MOVING AVERAGE METHOD

SPAN	G	LC50	95 PERCENT CONFIDENCE LIMITS	
1	.1031077	3.061726	2.730452	3.457326

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