DATA EVALUATION REPORT

1. Chemical: Linuron / 035506

2. Test Material: Technical, 96.2%

3. Study Type: Fish 96-hour LC50 with Rainbow trout

4. Study Identification: Wetzel, J.W., Static Acute 96-hour LC50 of Linuron (INZ-326-118) to Rainbow Trout (Salmo gairdneri)
   Laboratory: Haskell
   Study No/Date: HLR 525-86 / 8-25-86
   Study Submitted to EPA by Dupont

5. Review By: Daniel Rieder, Wildlife Biologist Daniel Rieder 3.31.88
   Ecological Effects Branch
   Hazard Evaluation Division

6. Approved By: Norman J. Cook, Head, Section 2 Norman J. Cook 3.31.88
   Ecological Effects Branch
   Hazard Evaluation Division

7. Conclusion: This study has been reviewed and found to be scientifically sound. It fulfills the guideline requirement for a coldwater fish acute study. The 96-hour LC50= ~~3~~ 3.085 ppm with 95% C.L. of 2.09-6.05 ppm. MRID 10/7/2010

8. Recommendations: N/A

9. Background: This study was submitted to support

10. Discussion of Individual Studies: N/A

MRID# 40445501

See Reg Standard

11. Materials and Methods:

Test Material: Linuron 96.2% ai

Test Organism: Rainbow trout
Source: Trout Lodge No/Level: 10
Length: mean=3.6 cm Weight: mean=0.767 g
Acclimation: 86 days, 48 hrs without food
Organisms per container: 5 Loading: 0.256 g/L

Test Containers: glass aquaria, 21 liter
Aerated? No Replicates: 2
Volume test Solution: 15 Liters

Test Conditions: Static Photoperiod: 16 hrs/day
Temperature: 12°C Test Solution: Well Water
Controls: Untreated and Solvent

12. Reported Results: 96-hour LC50=3.09 ppm
95% CL: none reported

CONCENTRATION MEASURED PPM	MORTALITY 96-HOUR	CONDITIONS DO	pH
control	0	8.9	7.4
solv. cont.	0	8.8	7.4
0.16	0	8.7	7.4
0.36	0		
0.65	0		
1.17	0		
2.09	0	7.2	7.3
3.69	8		
6.05	10		
10.37	10		
17.44	10	9.0	7.5

13. Study Author's Conclusions: Under the conditions of this study, linuron was moderately toxic to coldwater fish.

14. Reviewer's Discussion:

A. Test Procedure: The test procedure was acceptable. Test concentrations were measured.

B. Statistical Analysis: Independent statistical analysis was performed, see attached printout.

C. Discussion of Results: The results show that linuron is moderately toxic to fish.

D. Category of Study: Core

15. Completion of One-Liner: Completed

16. CBI Attachments: N/A

Daniel Rieder linuron rainbow trout 3-31-88

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CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
17.44	10	10	100	9.765625E-02
10.37	10	10	100	9.765625E-02
6.05	10	10	100	9.765625E-02
3.69	10	8	80	5.46875
2.09	10	0	0	9.765625E-02
1.17	10	0	0	9.765625E-02
.65	10	0	0	9.765625E-02
.36	10	0	0	9.765625E-02
.16	10	0	0	9.765625E-02

THE BINOMIAL TEST SHOWS THAT 2.09 AND 6.05 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 3.085468

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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