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2-28-91

DATA EVALUATION RECORD

1. Chemical: Prometon

2. Test Material:
2,4-bis[isoproylamino]-6-methoxy-s-triazine 98.5% a.i.

3. Study Type: A dietary LC_{50} study with the Mallard

4. Study ID: MRID NO. 416091-06
Long, Ronald (1990) Prometon: A dietary LC_{50} study with the Mallard. Unpublished study prepared by Wildlife International Ltd., 305 Commerce Drive, Easton, MD 21601.

5. Reviewed by: Cynthia Moulton
Biologist
EEB/EFED
Cynthia Moulton
2.27.91

6. Approved by: Norman Cook
Head Section II
EEB/EFED
Norman J. Cook
2.28.91

7. Conclusion: This study follows EPA guideline requirements and is classified as core. The dietary LC_{50} value for the mallard duck exposed to Prometon 98.5% a.i. was determined to be greater than 5620 ppm a.i., the highest dosage tested. The no observed effect concentration was <562 ppm a.i., the lowest dosage tested, due to a dose responsive reduction in weight gain.

8. Recommendations: N/A

9. Background:
A dietary LC_{50} study is required to support reregistration of Prometon. Review of this study is part of phase IV, response of data submission, of the reregistration process.

10. Discussion of Individual Tests: N/A.

11. Materials and Methods:

a. Test Animals - the mallard duck (Anas platyrhynchos), obtained from Whistling Wings, Box 1, 113 Washington Street, Hanover, Illinois, 61041. Birds were acclimated for 9 days, were 10 days old at the initiation of the test, and appeared to be in good health. All birds were from the same hatch, pen-reared and phenotypically indistinguishable from wild birds.

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b. Test System - The mallards were maintained on a diet of Wildlife International game bird ration. Water and feed were provided ad libitum during the acclimation and during the test.

c. Dosing - Groups of ten ducklings were assigned to each of the treatment and control group; levels were 562 ppm, 1000 ppm, 1780 ppm, 3160 ppm, and 5620 ppm. The test diets were prepared by mixing the test substance into the diet with 2% corn oil.

d. Design - Ten birds in each of the controls and treatment levels were used. The ducklings were weighed initially and on day 5 of the test. Food consumption of the birds was estimated by group from days 0-5 and days 6-8.

e. Statistics - The study was not conducive to calculating an LC50 value. The LC50 value was estimated by visually inspecting the mortality data.

12. Reported Results:

There were no mortalities at any of the test concentrations and no observed signs of toxicity. There was a dose responsive effect on mallard body weights from Day 0 to Day 5, with a reduction in weight gain occurring at 562, 1000, and 1780 ppm a.i. test concentrations and a loss of body weight occurring at the 3160 and 5620 ppm a.i. test concentrations when compared to controls. A reduction in feed consumption was observed at the 1780, 3160, and 5620 ppm a.i. test concentrations during the exposure period.

13. Study Authors Conclusion:

"In conclusion, the dietary LC_{50} value for mallards exposed to Prometon was determined to be greater than 5620 ppm a.i., the highest dosage tested. "

14. Reviewers Discussion and Interpretation of the Study:

a. Test Procedures - The study appeared to follow EPA guideline requirements.

b. Statistical Analysis - There were no treatment related mortalities, the authors LC_{50} value was based on visual inspection of the mortality data.

c. Discussion/ Results - Based on these data, it appears that the LC_{50} of Prometon 98.5% a.i. for the mallard duck is greater than 5620 ppm nominal concentration. This indicates that Prometon is practically nontoxic to waterfowl species on a dietary basis. The no observed effect concentration was <562 ppm a.i., the lowest dosage tested, due to a dose responsive reduction in weight gain.

d. Adequacy of Study

1) Classification: Core

2) Rationale: The study follows EPA guidelines protocol.

3) Repairability: N/A

15. Completion of One-Liner:

TABLE 3

BODY WEIGHT AND ESTIMATED FEED CONSUMPTION OF CONTROL MALLARDS

ncentration	Average Body Weight (Grams)						Feed Consumption Grams Per Bird Per Day	
	Exposure			Observation		Total	Exposure	Observation
ppm	Day 0	Change	Day 5	Change	Day 8	Change	Days 0-5	Days 6-8
0	162	153	315	100	415	253	73	100
0	162	141	303	115	418	256	64	103
0	166	94	260	175	435	269	66	146

TABLE 4

BODY WEIGHT AND ESTIMATED FEED CONSUMPTION OF MALLARDS
EXPOSED TO PROMETON FOR FIVE DAYS

ncentration	Average Body Weight (Grams)						Feed Consumption Grams Per Bird Per Day	
	Exposure			Observation		Total	Exposure	Observation
pm a.i.	Day 0	Change	Day 5	Change	Day 8	Change	Days 0-5	Days 6-8
562	169	110	279	119	398	229	59	116
000	175	104	279	130	409	234	60	125
780	165	66	231	136	367	202	41	102
160	172	-6	166	118	284	112	28	101
620	176	-21	155	128	283	107	17	94