

US EPA ARCHIVE DOCUMENT

409242-15
MRID No.

129008
Shaughnessy No.

DATA EVALUATION RECORD
Avian (Mallard Duck) Dietary LC₅₀
Accent Technical

1. TEST MATERIAL

Accent Technical

3-Pyridinecarboxamide, 2-[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N, N-Dimethyl

2. STUDY MATERIAL - Technical

Accent Technical	94.5 W/W%
Inert ingredients	<u>5.5</u>
	100.0

3. STUDY TYPE- Avian Dietary LC₅₀.

Species tested- Mallard duck *Anas platyrhynchos*

4. STUDY IDENTIFICATION:

Johnson, M. and M. Jaber. 1987. H # 16,925: A dietary LC₅₀ study with the mallard duck. Wildlife International Ltd. Project No.: 112-187. E.I. du Pont de Nemours & Company, Inc., Wilmington, DE 19898. MRID 409242-15.

5. REVIEW BY:

James J. Goodyear
Biologist, Section 1
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

Signature: James Goodyear
Date: March 19, 1989

6. APPROVED BY:

Raymond W. Matheny
Head, Section 1
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

Signature: Raymond W. Matheny
Date: 3/15/89

7. CONCLUSIONS:

The study is scientifically sound and meets the Avian Dietary LC₅₀ guidelines for the registration of 3-Pyridinecarboxamide, 2-[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl.

8. RECOMMENDATIONS- N/A.

9. BACKGROUND:

The study was submitted to meet the requirements of registration for 3-Pyridinecarboxamide, 2[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl.

10. DISCUSSION OF INDIVIDUAL TEST- N/A.

11. MATERIALS AND METHODS:

A. Test animals:

Mallard ducklings were obtained from Whistling Wings, Box 1, 113 Washington Street, Hanover, Illinois 61041. They were one day old when obtained and 8 days old when the study started. They were acclimated but not medicated before the study.

B. Dose:

There were five experimental levels: 562, 1000, 1780, 3160 and 5620 ppm of the technical chemical. Since the technical grade was 94.5% ai, the actual levels would be 531, 945, 1682, 2986 and 5311 ppm ai of 3-Pyridinecarboxamide, 2[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl.

C. Design:

The birds were too young to sex but ten were placed (by random draw) into each of five experimental levels and five vehicle (corn oil, >2%) control groups of ten birds each. Their cages were 72 x 90 x 24 cm, the photoperiod was 16 hours light and eight hours of dark, the brooding compartment of the pens was 35° C ±1° and the room temperature was 25° C ±2°C and had a relative humidity of 65%.

The birds' behavior was observed daily. Body weights, the groups average, were taken at the start of the study, on day-5 and day-8.

The acclimation period was 12 days, the experimental period 5 days and the observation period was 3 days.

D. Statistics:

Since there were not mortalities, the LC₅₀ was assigned as greater than the highest level.

12. REPORTED RESULTS:

LC₅₀ >5620 ppm (5311 ppm ai) NOEL > 1780 ppm (1682 ppm ai)

13. STUDY AUTHORS' CONCLUSIONS/QA MEASURES:

"The dietary LC₅₀ value of H # 16,925 in the mallard was determined to be greater than 5620 mg/kg, the highest concentration tested. The no-observed-effect concentration was 1780 mg/kg, the highest concentration tested." and

"This study was examined for conformance with Good Laboratory Practices as published by the U. S. Environmental Protection Agency, Office of Pesticide Programs in 40 CFR Part 160".

14. REVIEWER'S DISCUSSION AND INTERPRETATION OF THE STUDY:

A. Test Procedures:

The study was scientifically sound but did contain some minor errors: 1) the LC₅₀ and NOEL were not adjusted to the percent ai in the sample, 2) the percent ai in the sample was not made clear in the report (the 94.5% ai figure was confirmed in a telephone call to Tony Catka of Du Pont) and 3) there is a minor inconsistency in the submission in the spelling of the IUPAC name of the chemical (this review uses the spelling on the label).

B. Statistical Analysis:

Since there were no mortalities, the LC₅₀ was considered to be greater than the highest level used (5311 ppm ai) and the NOEL was considered to be greater than the highest level in which no overt effects were observed (1682 ppm ai).

C. Discussion/Results:

The study is scientifically sound and would result in the classification of 3-Pyridinecarboxamide, 2[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl as being "practically nontoxic" to mallards in a dietary study.

D. Adequacy of the Study:

Classification- Core at LD₅₀ ^c>5,000 ppm and NOEL >1682 ppm. X

Rational- The study was scientifically sound and fulfills the waterfowl dietary exposure portion of the guideline requirements for the registration of 3-Pyridinecarboxamide, 2[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl.

Repair- N/A.

15. COMPLETION OF ONE-LINER FOR STUDY- Yes, see attached.

16. CBI APPENDIX- N/A.