

US EPA ARCHIVE DOCUMENT

409242-13
MRID No.

129008
Shaughnessy No.

DATA EVALUATION RECORD
Avian (Bobwhite Quail) Oral Acute LD₅₀
Technical Grade of Accent

1. TEST MATERIAL

Accent Technical

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

2. STUDY MATERIAL - Accent Technical

Accent Technical	94.5 W/W %
Inert ingredients	<u>5.5</u>
	100%

3. STUDY TYPE- Avian Single-dose Oral LD₅₀.

Species tested- Bobwhite quail *Colinus virginianus*

4. STUDY IDENTIFICATION:

Grimes, J. and M. Jaber. 1987. H # 16,925 An acute oral toxicity study with the bobwhite. Wildlife International Ltd. Project No. 112-118. submitted by E.I. Du Pont de Namours and Company, Wilmington, Delaware 19898. MRID 409242-13.

5. REVIEW BY:

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

Signature: James Goodyear

Date: March 14, 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 guideline requirements for an Avian Single-Dose Oral LD₅₀ study for the registration of 3-Pyridinecarboxamide, 2[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl. Because the study found an LD₅₀ >2,000 mg/kg the pesticide would be classified as practically non-toxic to bobwhite quail.

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:**

Bobwhite quail (38 weeks old) from Fritts' Quail Farm, RD*3, Box 362, Phillipsburg, NJ 08865. The birds were observed and acclimated for 14 weeks and fasted for at least 15 hours before dosing.

B. Dose:

H # 19, 925 was administered in five nominal dosages (292, 486, 810, 1350 and 2250 mg/kg). Since the technical grade was 94.5% ai, the actual levels would be 276, 459, 765, 1276 and 2126 mg/kg ai of 3-Pyridinecarboxamide, 2[[[(4,6-Dimethoxy-pyrimidin-2-yl) Amino-carbonyl]] Aminosulfonyl]]-N,N-Dimethyl.

C. Design:

There were five test groups of five male and five females (one for each for each test level) plus a vehicle control group of five males and five females. Each group was housed in a 78 cm x 51 cm pens that had a sloping roof (20-25 cm in height) in a heated room (23°C ±2°C) in which lighting was provided by fluorescent lights; "The photoperiod ... was eight hours of light per day ... throughout the study" including the acclimation period. The toxicant was intubated with gelatin capsules. The birds were observed for 14 days after dosing. "Individual body weights were measured at initiation of the test and by group on Days 3, 7 and 14 of the test. Average estimated feed consumption was determined for each dosage group and the control for Days 0-3, 4-7 and 8-14".

D. Statistics:

"The mortality pattern in this study was not conducive to calculating the LD₅₀ value. Therefore, an estimation of the LD₅₀ value was made by a visual inspection of the mortality data".

12. REPORTED RESULTS:

LD₅₀ = 2,250 (2,126) mg/kg The NOEL was > 2,250 (2,126) mg/kg.

13. STUDY AUTHORS' CONCLUSIONS/QA MEASURES:

"The bobwhite acute oral LD₅₀ value for H # 16,925 was determined to be greater than 2250 mg/kg, the highest dosage tested. The no-observed-effect dosage was 2250 mg/kg." ...

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. The report was determined to be an accurate reflection of the data obtained."

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

A. Test Procedures:

The procedures were not in complete accordance with the guidelines for testing avian single-dose oral LD₅₀. It contains some minor errors: 1) the LD₅₀ 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 DuPont), 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) and 4) the photoperiod was not 10 hours light/ 14 hours dark.

B. Statistical Analysis:

Since there were no mortalities, the LD₅₀ was considered to be greater than the highest level used (2126 mg/kg ai) and the NOEL was considered to be greater than the highest level in which no overt effects were observed (also 2126 mg/kg 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 bobwhite quail in an acute toxicity study.

D. Adequacy of the Study:

Classification- Core; the LD₅₀ and NOEL >2,000 mg/kg.

Rational- The study was scientifically sound and fulfills the guideline requirements for an avian single dose oral LD₅₀ 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 sheets.

16. CBI APPENDIX- N/A.