

US EPA ARCHIVE DOCUMENT

Sent to Griffin
12/12/91

D164207
DPBARCODE (RECORD)
128992
SHAUGHNESSY NO

REVIEW NO.

EEB REVIEW

DATE IN: 05-10-91 OUT: _____

CASE # : 004595 REREG CASE # : _____
SUBMISSION # : S395637 LIST A, B, C, D
ID # : 001812-00327

DATE OF SUBMISSION _____ 03-01-91

DATE RECEIVED BY EFED _____ 05-10-91

SRRD/RD REQUESTED COMPLETION DATE _____ 08-27-91

EEB ESTIMATED COMPLETION DATE _____ 08-27-91

SRRD/RD ACTION CODE/TYPE OF REVIEW _____ 400 - Data-Misc

MRID #(S) _____ 417994-01

DP TYPE _____ 001 - Submission Related Data package

PRODUCT MANAGER, NO. _____ P. Hutton (18)

PRODUCT NAME(S) _____ Sulfluramid (GX-071)

TYPE PRODUCT F R I N H D _____ Insecticide

COMPANY NAME _____ Griffin Corp.

SUBMISSION PURPOSE _____ Review bobwhite quail dietary

INCLUDE USE(S) _____ study

COMMON CHEMICAL NAME _____ Sulfluramid

DP BARCODE: D164207

CASE: 004595
SUBMISSION: S395637

DATA PACKAGE RECORD
BEAN SHEET

DATE: 05/09/91
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 400 DATA-MISC DATA-NOT REQUES
CHEMICALS: 128992 N-Ethyl perfluorooctanesulfonamide 98.5000%

ID#: 001812-00327 GX-071 TECHNICAL
COMPANY: 001812 GRIFFIN CORPORATION
PRODUCT MANAGER: 18 PHILLIP HUTTON 703-557-2690 ROOM: CM2 207
PM TEAM REVIEWER: MICHAEL MENDELSON 703-557-4409 ROOM: CM2 203
RECEIVED DATE: 03/01/91 DUE OUT DATE: 11/06/91

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 164207 EXPEDITE: N DATE SENT: 05/09/91 DATE RET.: / /
CHEMICAL: 128992 N-Ethyl perfluorooctanesulfonamide
TYPE: 001 Submission Related Data Package
MIN DUE DATE: 08/27/91 CSF: N LABEL: N

| ASSIGNED TO | DATE IN | DATE OUT |
|-------------|----------|----------|
| DIV : EFED | 05/10/91 | 09/05/91 |
| BRAN: EEB | / / | 09/05/91 |
| SECT: | / / | / / |
| REVR : | / / | / / |
| CONTR: | / / | / / |

* * * DATA REVIEW INSTRUCTIONS * * *

Attention Curtis Laird:

Please review the attached study. Thanks.

8 -Day Acute Dieatary LC50 Study in Bobwhite Quail
MRID # 417994-01

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

| DP BC | BRANCH/SECTION | DATE OUT | DUE BACK | INS | CSF | LABEL |
|--------|----------------|----------|----------|-----|-----|-------|
| 164205 | EEB | 05/09/91 | 08/27/91 | Y | N | N |

100.0 Pesticide Name:

Sulfluramid (GX-071)

100.3 Submission Purpose:

Submission of an avian dietary LC₅₀ study

101.0 Chemical and Physical Properties:

101.1 Common Name:

Sulfluramid

103.0 Toxicological Properties:

8-Day Dietary LC₅₀ for bobwhite

105.0 Conclusions:

This study indicates sulfluramid is highly toxic to bobwhite quail with an LC₅₀ of 286 ppm. This study does fulfill the requirement in support of registration for an avian dietary LC₅₀ study.

There were reductions in body weight and food consumption at all dose levels, including 78 ppm (lowest level tested). Therefore, the NOEL is < 78 ppm when compared to control instead of 156 ppm based on mortality.

Curtis E. Laird 9-4-91

Curtis E. Laird, Fishery Biologist
Ecological Effect Branch
Environmental Fate and Effects Division (H7507C)

Allen W. Vaughan 9-4-91

Allen Vaughan, Acting Head-Section 2
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

Douglas Urban 9/4/91

Douglas Urban, Acting Chief
Ecological Effects Branch
Environmental Fate and Effects Division (H7507C)

DATA EVALUATION RECORD

1. CHEMICAL: Sulfluramid
2. TEST MATERIAL: 96.5% (technical a i.)
3. TEST TYPE: 8-Day Dietary LC₅₀

Test Species: Bobwhite Quail (Colinus virginianus)

4. STUDY IDENTIFICATION:

Carol A. Petersaon (1990) 8-Day Dietary LC₅₀ Study in Bobwhite Quail; Project No. 90 QC 151; Prepared by Bio-Life Associates, Ltd for Griffin Corporation, Rocky Ford Road, Valdosta, GA 31601-1847; Acc. No. 417994-01.

5. REVIEWED BY:

Curtis E. Laird
Fishery Biologist
EEB/EFED

Signature: Curtis E. Laird

Date: 9-3-91

6. APPROVED BY:

Norman J. Cook
Supervisory Biologist
EEB/EFED

Signature: Allen W. Vaughan

Date: 9.4.91

7. CONCLUSIONS:

This study indicates sulfuramid in highly toxic to bobwhite quail with an LC₅₀ of 286 ppm. This study does fulfill the requirement in support of registration for an avian dietary LC₅₀ study.

There were reductions in body weight and food consumption at all dose levels, including 78 ppm (lowest level tested). Therefore, the NOEL is < 78 ppm instead of the reported 156 ppm based on mortality.

8. RECOMMENDATIONS: N/A

9. BACKGROUND:

This study was submitted in support of sulfluramid registration.

10. DISCUSSION OF INDIVIDUAL TEST: N/A

11. MATERIAL TESTED:

- A. Test Animals: Test animals were 11-day old bobwhite quails. Eggs were purchased from Oak Ridge Game Farm and incubated at Bio-Life Associates, Ltd.
- B. Test Design: Birds were tested in a 45.7 x 61.0 x 45.7 cm wire pens; photoperiod was 24-hours per day; temperature ranged from 90° F to 110° F; relative humidity ranged from 33% to 65%.
- C. Dose: Ten birds per dose level; 5 dosage levels plus negative control (0, 78, 156, 312, 625, and 1250 ppm).
- D. Statistical Analysis:
Wilcoxon and Litchfield

12. Reported Results:

The study author found the 8-day dietary LC₅₀ to be 300 ppm and the no-observed-level was 156 ppm.

13. STUDY AUTHOR'S CONCLUSION/OA MEASURES:

The Quality Assurance Officer claimed that this study was conducted according to the Good Laboratory Practice Standard.

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

- A. Test Procedure: The test procedure complied with the recommended EPA protocol of October 1982.
- B. Statistical analysis: The statistics were verified with Stephan's computer program (binomial test) as 286 ppm.
- C. Discussion/Result: GX-071 was considered to be highly toxic to bobwhite quail with an LC₅₀ of 286 ppm.

D. Adequacy of Study:

1. Category: Core
2. Rationale: N/A
3. Repairable: N/A