

US EPA ARCHIVE DOCUMENT

036101
SHAUGHNESSEY NO.

REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 2/7/84 OUT 5/14/84

FILE OR REG. NO. 1471-70

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 11/3/83

DATE RECEIVED BY HED 2/3/84

RD REQUESTED COMPLETION DATE 5/23/84

EEB ESTIMATED COMPLETION DATE 5/16/84

RD ACTION CODE/TYPE OF REVIEW 400/Data

TYPE PRODUCT(S): I, D, H, F, N, R, S Herbicide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. R. Mountfort (23)

PRODUCT NAME(S) Treflan

COMPANY NAME Elanco Products Company

SUBMISSION PURPOSE Submission of data to support PR-Notice

83-4 & 4A

SHAUGHNESSEY NO. CHEMICAL, & FORMULATION % A.I.

036101

Trifluralin

Pesticide Name: Trifluralin

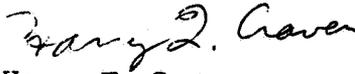
100 Submission Purpose and Label Information

The registrant is submitting data required under PR-Notice 83-4 & 4A to support product registration.

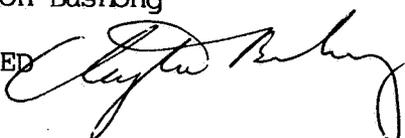
101.4 Adequacy of Toxicity Data

Two avian dietary toxicity studies, one on bobwhite quail and one on mallard ducks, were reviewed under this submission. Both studies were found to be acceptable to support the registration of Treflan products. With eight-day LC₅₀ values greater than 5000 ppm, technical Trifluralin can be characterized as practically non-toxic to upland gamebirds and waterfowl in dietary exposures.

 5-16-84
Les Touart
Fisheries Biologist
Section 4

 5/16/84
Harry T. Craven
Head
Section 4

Clayton Bushong
Chief
EEB/HED

 5/16/84

DATA EVALUATION RECORD

1. CHEMICAL: Trifluralin
2. FORMULATION: 99.96% a.i.
3. CITATION: Emmerson, J.L. and C.C. Kehr (1983) The Toxicity of Trifluralin (Compound 36352) to mallards in a five-day dietary study. Study 7018-77. Unpublished report prepared by Lilly Research Laboratories for Elanco. [Acc. No. 252283]
4. REVIEWED BY: Les Touart
Fisheries Biologist
EEB/HED
5. DATE REVIEWED: 5/11/83
6. TEST TYPE: Avian dietary toxicity study (waterfowl)
 - A. TEST SPECIES: Mallard duck
7. REPORTED RESULTS: Based on the parameters evaluated in this study the eight-day LC₅₀ value for Trifluralin was greater than 0.5%, the highest level tested.
8. REVIEWERS CONCLUSION: The study is scientifically sound and fulfills the guidelines requirement for an acceptable avian dietary toxicity study. With an LC₅₀ > 5000 ppm, Trifluralin can be characterized as practically non-toxic to waterfowl.

Material/Methods

Test Procedure

The test methods are consistent with current EPA Guidelines for conducting an avian dietary toxicity study. Specifically: Age at initiation of study - 14 days; Levels - 0.2 and 0.5% with controls; Number tested - 10/level; Environmental conditions - ambient room temperature, 12 hr light photoperiod.

Statistical Analysis

N/A

Discussion/Results

No mortality or signs of toxicity occurred in the control group or in any group that received the Trifluralin treated diets. The eight-day LC₅₀ > 0.5% Trifluralin treated diet. Food consumption was unaffected by treatment.

Reviewer's Evaluation

A. Test Procedure

The methods used were acceptable.

B. Statistical Analysis

N/A

C. Discussion/Results

The data support the conclusions drawn.

D. Conclusions

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

DATA EVALUATION RECORD

1. CHEMICAL: Trifluralin
2. FORMULATION: 99.96% a.i.
3. CITATION: Emmerson, J.L. and C.C Kehr. (1983) The toxicity of Trifluralin (Compound 36352) to bobwhite in a five-day dietary study. Study 70016-77. Unpublished report prepared by Lilly Research Laboratories for Elanco. [Acc. No. 252283]
4. REVIEWED BY: Les Touart
Fisheries Biologist
EEB/HED
5. DATE REVIEWED: 5/11/83
6. TEST TYPE: Avian dietary toxicity study (Upland gamebird)
 - A. TEST SPECIES: Bobwhite quail
7. REPORTED RESULTS: Based on the parameters evaluated in this study the eight-day LC₅₀ value for Trifluralin was greater than 0.5%, the highest level tested.
8. REVIEWERS CONCLUSIONS: The study is scientifically sound and fulfills the guidelines requirement for an acceptable avian dietary toxicity study. With an LC₅₀ > 5000 ppm, Trifluralin can be characterized as practically non-toxic to upland gamebirds.

5

Materials/Methods

Test Procedure

The test methods are consistent with current EPA Guidelines for conducting an avian dietary toxicity study specifically: Age at initiation of study - 12 days; Levels - 0.2 and 0.5% with controls Number tested - 10/level; Environmental conditions - 12 hr light photoperiod.

Statistical Analysis

N/A

Discussion/Results

No mortality occurred in the control group or in any group that received the Trifluralin treated diets. Treatment related diarrhea was seen in one replicate from the 0.5% group on test-days six thru eight. The eight-day LC₅₀ > 0.5% Trifluralin treated diet. Food consumption was unaffected by treatment.

Reviewer's Evaluation

A. Test Procedure

The methods used were acceptable.

B. Statistical Analysis

N/A

C. Discussion/Results

The data support the conclusions drawn.

D. Conclusions

1. Category: Core
 2. Rationale: N/A
 3. Repairability: N/A
- 6