

US EPA ARCHIVE DOCUMENT

Shaughnessy No. 900497

DATA EVALUATION RECORD

1. CHEMICAL: Dichlormid
2. TEST MATERIAL: 97% purity
3. TEST TYPE: Avian dietary (LC₅₀)
4. STUDY IDENTIFICATION:
Hakin, Barbara, 1990. "The Dietary Toxicity (LC₅₀) of Dichlormid to the Bobwhite Quail" prepared by Huntingdon Research Centre Ltd. Study For: Stauffer Chemical Company—¹⁹³⁵
MRID No.: 41561402
5. REVIEWED BY: Carol J. Belew, Biologist *Carol Belew 7/30/91*
EFED/EEB
6. APPROVED BY: Les Touart, Section Head *L. T. 7/30/91*
EFED/EEB
7. CONCLUSION:
This study meets the EPA requirements for a core study and is a scientifically sound study. Huntingdon Laboratories determined the LC₅₀ was above 5,200 ppm. EEB concurs with this conclusion. This study indicates that Dichlormid is practically non-toxic to Bobwhite quail.
8. RECOMMENDATIONS: N/A
9. BACKGROUND: An initial range-finding test was not conducted because the compound was considered to be of low toxicity.
10. DISCUSSION OF INDIVIDUAL TESTS: N/A
11. METHODS AND MATERIALS:
 - A. Test Organisms:
Age/stage of maturity- 13 days old
Size- 18.8-19.4 grams
Sex- Not sexed
Source- D.R. and R.E. Wise, Cambridgeshire, England.
 - B. Dosage Form:
Solvents/vehicles- Not used
Route of administration- Administered in basal diet
 - C. Referenced Protocol
Test levels- 0, 0, 0, 163, 325, 650, 1,300, 2600, and 5,200 ppm.
Dose spacing factor
Number per level- 10
Holding/acclimation- N/A



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Pen/cage facilities- The birds were housed in wooden boxes measuring 83x52x51 inches and contained 10 birds each.

Feeding- The birds were fed standard HRC chick diet in meal form; feed was available continuously.

Physical condition- Birds were in good condition at the beginning of the test.

Test conditions

Temperature- 24-28°C

Humidity- 48%

Photoperiod- light was provided continuously

Diet preparation- The test material was incorporated in the basal diet (Standard HRC chick diet) to form a premix. All diets were prepared immediately prior to use and stored at room temperature until the study end.

Controls- Control birds were fed Standard HRC chick diet.

Measured test levels- 0ppm, 163ppm, 325ppm, 650ppm, 1300ppm 2600, and 5200 ppm

Observation period- 11 days

Statistical methods- No statistics were run on the study because no clinical signs of toxicity were observed.

12. REPORTED RESULTS:

Effects criteria- Body weight, food consumption, bird health and mortalities, and post-mortem examinations

LC50- Determined to be above 5,200 ppm.

Dose response data- All birds in the test groups remained in good health throughout the study. One bird in the control groups died.

Observation period- 11 days

Food consumption- There was no evidence of change in food consumption.

Body weight changes- There was no evidence of bodyweight change.

Toxic signs- No signs of toxicity

Necropsy results- Post-mortem examinations of the 5,200 ppm group detected no abnormalities.

Test conditions

Temperature- 24-28°C

Humidity- 48%

13. STUDY AUTHOR'S CONCLUSIONS/QUALITY ASSURANCE MEASURES:

Under the conditions of this study, the LC₅₀ of Dichlormid to the Bobwhite Quail could not be determined. The LC₅₀ value must lie in excess of 5,200 ppm, the maximum dose level used. Compliance With Good Laboratory Practice Standards sheet for HRC Report No. 202/891262 was signed by Barbara Hakins, Study Director on June 26, 1990. The Compliance information states:

To the best of our knowledge and belief the study described in this report was conducted in compliance with the following Good Laboratory Practice Standards:

United States Environmental Protection Agency, (FIRFRA), Title 40 Code of Federal Regulations Part 160, Federal Register, 29 November 1983 and subsequent amendment Federal Register 17 August 1989.

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

- A. Test Procedures: This study is scientifically sound and generally is in accordance with the recommended protocols outlined in the SEP. However, no range finding test were performed because the compound was considered to be of low toxicity.
- B. Statistical Analysis: No statistical analysis was done because the LC_{50} was determined to be above the highest dose level of 5,200 ppm.
- C. Discussion/Results: This study was scientifically sound and thorough.
- D. Adequacy; of Test:
 - 1. Validation Category: This study meets the criteria for a core study
 - 2. Rationale: Dichlormid is practically non-toxic to Bobwhite quail.

15. COMPLETION OF ONE-LINER FOR TEST:

16. CBI APPENDIX: