MIRD No. 416098-02

DATA EVALUATION RECORD

1. **CHEMICAL:** Pyrazon
   Shaughnessey No. 069601

2. **TEST MATERIAL:** Pyrazon technical, 94.1% a.i.

3. **STUDY TYPE:** Avian Acute Oral LD50
   Species used: Bobwhite Quail (Colinus virginianus)

4. **STUDY ID:** Munk, R. 1990. Avian single-dose oral LD-50 of Reg. No. 13 033 - 95% (pyrazon) to the bobwhite quail (Colinus virginianus). Conducted by BASF Aktiengesellschaft, Republic of Germany for BASF Corporation, Research Triangle Park, NC. EPA MIRD No. 416098-02.

5. **REVIEWED BY:**

   Clyde R. Houseknecht
   Wildlife Biologist
   EEB/EFED

   Signature: Clyde Houseknecht
   Date: 11/6/98

6. **APPROVED BY:**

   Henry T. Craven, Head
   Review Section #4
   EEB/EFED

   Signature: Henry T. Craven
   Date: 11/6/98

7. **CONCLUSIONS:** The study is scientifically sound and fulfills the guideline requirements. The acute oral LD50 of pyrazon technical was determined to be greater than 2,000 mg/kg body weight therefore, pyrazon is considered to be practically nontoxic to upland game birds..

8. **RECOMMENDATIONS:** N/A

9. **BACKGROUND:** N/A

10. **DISCUSSION OF INDIVIDUAL TESTS:** N/A

11. **MATERIALS AND METHODS:**

A. Test Animals: Juvenile bobwhite quail about five months of age were procured from Herbert Kuberich Quail Breeding, Wiesentheid, Federal Republic of Germany. Birds were adapted to the test cages for one week prior to the test.

B. Test System: "The birds were weighed about one week prior to the beginning of the test and were allocated to the test groups by a randomization plan on the basis of their body weights prepared by following a standard laboratory method". During adaptation and the test period the room temperature was "generally" about 20 $\pm$ 1 $^{\circ}$ C. Photoperiod was 12 hours of light and 12 hours of darkness. Birds were medicated with Tiamutin^{R} in the drinking water for three consecutive days prior to the test. With exception of a fasting period of 15 to 20 hours immediately before the test, birds were fed and watered ad lib.

The test substance was administered by gavage into the crop.

C. Dosage: A range finding test showed no mortality or severe illness at 2,000 mg/kg thus, only two treatment levels were used in the definitive test; 1,000 and 2,000 mg/kg.

D. Design: Single-dose Avian LD50 study.

E. Statistics: Body weight on days 0 and 14 was analyzed using one-way analysis of variance followed by Dunnett's test. Because only one bird died in the highest treatment level, there was no need for statistical evaluation of the LD50 data.

12. **REPORTED RESULTS:**

One male bird in the highest dosage group died on the first day of treatment. The LD50 for pyrazon exceeds 2,000 mg/kg. There was no significant difference in the body weights of the treatment birds as compared to the control birds.

13. **STUDY AUTHOR'S CONCLUSION/QUALITY ASSURANCE MEASURES:**

The Head of the section for acute and subchronic toxicology and the study director certify that the study was conducted in accordance with good laboratory practice.

14. **REVIEWER'S DISCUSSION AND INTERPRETATION OF STUDY RESULTS:**

A. Test Procedures: The procedures utilized in this study were in compliance with the EPA's Standard Evaluation Procedure (SEP) for the Avian Single-dose Oral LD50 test.

B. **Statistical Analysis:** Because only one bird died (in the highest treatment level), no statistical analysis of mortality was required. Given the similarity of mean weight values, large standard variations of these values, and small sample sizes, no reanalysis was required.

C. **Discussion/Results:** N/A

D. **Adequacy of the Study:**

(1) **Classification:** Core

(2) **Rationale:** N/A

(3) **Repairability:** N/A

15. **COMPLETION OF ONE-LINER:** Yes, October 29, 1990.

Shaughnessey No. 069601 Chemical Name CYHALOTHRIN Chemical Class ____ Page 1 of 1

Study/Species/Lab/Access #	Chemical % a.i.	Results	Reviewer/Date	Validation Status
14-Day Single Dose Oral LD_{50}, Species: BOBWHITE QUAIL, Lab.: WAFT, Acc. #: 416098-02	94.1	$LD_{50} > 2000$ mg/kg (95% C.L. ____) Contr. Mort.(%)= 0; Slope= ; # Animals/Level= 10; Age(Days)= 150; Sex = 3♂ 9♀; 14-Day Dose Level mg/kg/(% Mortality): 1000 (0), 2000 (10), — (—), — (—), — (—); Comments:	CRH 10/29/90	ACC
14-Day Single Dose Oral LD_{50}, Species: ____, Lab.: ____, Acc. #: ____		LD_{50} = mg/kg (95% C.L. ____) Contr. Mort.(%)= ; Slope= ; # Animals/Level= ; Age(Days)= ; Sex = ; 14-Day Dose Level mg/kg/(% Mortality): ( ), ( ), ( ), ( ), ( ); Comments:	____	____
8-Day Dietary LC_{50}, Species: ____, Lab.: ____, Acc. #: ____		LC_{50} = ppm (95% C.L. ____) Contr. Mort.(%)= ; Slope= ; # Animals/Level= ; Age(Days)= ; Sex = ; 8-Day Dose Level ppm/(%Mortality): ( ), ( ), ( ), ( ), ( ); Comments:	____	____
8-Day Dietary LC_{50}, Species: ____, Lab: ____, Acc. #: ____		LC_{50} = ppm (95% C.L. ____) Contr. Mort.(%)= ; Slope= ; # Animals/Level= ; Age(Days)= ; Sex = ; 8-Day Dose Level ppm/(%Mortality): ( ), ( ), ( ), ( ), ( ); Comments:	____	____
96-hour LC_{50}, Species: ____, Lab: ____, Acc. #: ____		LC_{50} = pp__ (95% C.L. ____) Contr. Mort.(%)= ; Sol. Contr. Mort.(%)= ; Slope= ; # Animals/Level= ; Temperature = ; 96-Hour Dose Level pp /(%Mortality): ( ), ( ), ( ), ( ), ( ); Comments:	____	____
96-hour LC_{50}, Species: ____, Lab.: ____, Acc. #: ____		LC_{50} = pp__ (95% C.L. ____) Con. Mor(%)= ; Sol. Con. Mor.(%)= ; Slope= ; # Animals/Level= ; Temp.= ; 96-Hour Dose Level pp /(%Mortality): ( ), ( ), ( ), ( ), ( ); Comments:	____	____
48-hour Invertebrate, Species: ____, Lab.: ____, Acc. #: ____		LC_{50} = pp__ (95% C.I. ____) Con. Mort.(%)= ; Sol. Con. Mort.(%)= ; Slope= ; # Animals/Level= ; Temp.= ; 96-Hour Dose Level pp /(%Mortality): ( ), ( ), ( ), ( ), ( ); Comments:	____	____

PAGES 85 THROUGH 89 HAVE BEEN REMOVED FROM THIS DOCUMENT. THOSE PAGES CONSIST OF REGISTRANT-SUBMITTED DATA.