MRID No.: 436781-09

DATA EVALUATION RECORD
§ 71-1(A) - AVIAN SINGLE-DOSE LD_{50} TEST

1. **CHEMICAL:** Azoxystrobin PC Code No.: 128810

2. **TEST MATERIAL:** ICIA5504 Purity: 96.2%

3. **CITATION**

Author: Barbara Hakin, Alison J. Johnson, Alan Anderson, and I. Suzanne Dawe
Title: ICIA5504: Acute Oral Toxicity (LD_{50}) to Mallard Duck
Study Completion Date: November 24, 1992
Laboratory: Huntingdon Research Centre Ltd., Huntingdon, Cambridgeshire, England
Laboratory Report ID: ISN 288/921094
Sponsor: Zeneca AG Products, Zeneca Inc., Wilmington, DE
MRID No.: 436781-09

4. **REVIEWED BY:**

William Erickson
Biologist
EEB/EFED/EPA

Signature: W. Erickson
Date: 4/01/96

5. **APPROVED BY:**

Harry Craven
Section Head 4
EEB/EFED/EPA

Signature: Harry T. Craven
Date: 6/20/96

6. **STUDY PARAMETERS**

Scientific Name of Test Organism: *Anas platyrhynchos*
Test Organisms Age/Size: 26 weeks/900-1280 g
Definitive Study Duration: 14 days

7. **CONCLUSIONS:** This study does not fulfill the guideline requirement for an avian acute oral toxicity test. Several test birds in the three highest treatment groups vomited within an hour of dosing. An accurate LD_{50} could not be determined. An LD_{50} of >250 mg/kg (i.e., the lowest test dose) classsifies azoxystrobin as no more than moderately toxic to mallard ducks.

(1)

DP Barcode: MRID No.: 436781-09

DATA EVALUATION RECORD
§ 71-1(A) - AVIAN SINGLE-DOSE LD_{50} TEST

1. **CHEMICAL:** Azoxystrobin PC Code No.: 129510

2. **TEST MATERIAL:** ICIA5504 Purity: 96.2%

3. **CITATION**

Author: Barbara Hakin, Alison J. Johnson, Alan Anderson, and I. Suzanne Dawe
Title: ICIA5504: Acute Oral Toxicity (LD_{50}) to Mallard Duck
Study Completion Date: November 24, 1992
Laboratory: Huntingdon Research Centre Ltd., Huntingdon, Cambridgeshire, England
Laboratory Report ID: ISN 288/921094
Sponsor: Zeneca AG Products, Zeneca Inc., Wilmington, DE
MRID No.: 436781-09

4. **REVIEWED BY:** Barbara H. Herbert, B.S., Associate Scientist
KBN Engineering and Applied Sciences, Inc.

Signature: Barbara H Herbert **Date:** 10-19-95

APPROVED BY: Pim Kosalwat, Ph.D., Senior Scientist,
KBN Engineering and Applied Sciences, Inc.

Signature: P. Kosalwat **Date:** 10/19/95

5. **APPROVED BY:** EEB, EFED

Signature: **Date:**

6. **STUDY PARAMETERS**

Scientific Name of Test Organism: *Anas platyrhynchos*
Test Organisms Age/Size: 26 weeks/900-1280 g
Definitive Study Duration: 14 days

7. **CONCLUSIONS:** This study does not fulfill the guideline requirements for an avian acute oral toxicity test. Several test birds in the three highest treatment groups vomited within an hour of dosing. An accurate LD_{50} could not be determined. An LD_{50} of >250 mg/kg (i.e., the lowest test dose) classsifies Sulfentrazone as no more than moderately toxic to mallard ducks. The NOEL for Sulfentrazone was 250 mg/kg.

2

5.75

Results Synopsis

LD_{50}: >250 mg/kg 95% C.I.: N/A
NOEL: 250 mg/kg Probit Slope: N/A

8. **ADEQUACY OF THE STUDY**

A. Classification: Supplemental.

B. Rationale: Actual dosage each bird received above 250 mg/kg is unknown due to vomiting.

C. Repairability: No.

9. **GUIDELINE DEVIATIONS:** None noted.

10. **SUBMISSION PURPOSE:** New Chemical.

11. **MATERIALS AND METHODS:**

A. Test Organisms

Guideline Criteria	Reported Information
Species: A wild waterfowl species, preferably the mallard (*Anas platyrhynchos*), or an upland game bird species, preferably the bobwhite (*Colinus virginianus*).	*Anas platyrhnchos*
Age at beginning of test: At least 16 weeks old.	26 weeks
Supplier	The Country Game Farms, Ashford, Kent, England
Acclimation period: At least 15 days.	15 days

B. Test System

Guideline Criteria	Reported Information
Pen facilities adequate?	Yes

Guideline Criteria	Reported Information
Photoperiod: 10-h light, 14-h dark is recommended.	10-h light; 14-h dark
Diet was nutritious and appropriate for species?	Yes
Feed withheld at least 15 hours prior to dosing?	Yes

C. **Test Design**

Guideline Criteria	Reported Information
Range finding test?	Yes, a range finding test was conducted using 6 birds.
Definitive Test **Nominal concentrations:** At least five, in a geometric scale, unless LD_{50} > 2000 mg ai/kg.	0, 250, 500, 1000, and 2000 mg/kg, uncorrected for purity
Controls: Water control or vehicle control (if vehicle is used)	Corn oil control
Number of birds per group: 10 (strongly recommended)	10, 5 male and 5 female
Vehicle: Distilled water, corn oil, propylene glycol, 1% carboxymethylcellulose, or gum arabic.	Corn oil
Amount of vehicle per body weight: Constant volume/weight % of body weight, not to exceed 1% (1ml/100g).	0.5ml/100g
Observations period: At least 14 days.	14 days

4

12. **REPORTED RESULTS**

Guideline Criteria	Reported Information
Quality assurance and GLP compliance statements were included in the report?	Yes
Individual body weights measured at beginning of test, on day 14 and at end of test if extended beyond 14 days?	Yes
Mean feed consumption measured at beginning of test, on day 14, and at end of test if extended beyond 14 days?	Yes
Control Mortality: Not more than 10%	0%
Raw data included?	Yes
Signs of toxicity (if any) were described?	Yes, vomiting at 500 mg/kg and above, one mortality at 2000 g/kg

Mortality

Dosage (mg/kg)	No. of Birds	Cumulative Number of Dead							
		Day of Study							
		1	2	3	4	5	6-8	9-11	12-14
Control	10	0	0	0	0	0	0	0	0
250	10	0	0	0	0	0	0	0	0
500	10	0	0	0	0	0	0	0	0
1000	10	0	0	0	0	0	0	0	0
2000	10	1	1	1	1	1	1	1	1

Other Significant Results: There was no clear evidence that the variations in body weights and food consumption among the control and the treatment groups were dose related. Vomiting following

treatment increased with increased ICIA5504 concentration from three of ten at 500 mg/kg to seven of ten birds at 2000 mg/kg.

Reported Statistical Results

Statistical Method: None

LD_{50}: >2000 mg/kg 95% C.I.: N/A

NOEL: 250 mg/kg Probit Slope: N/A

13. **Verification of Statistical Results:**

Statistical Method: visual inspection of data

LD_{50}: >250 mg/kg 95% C.I.: N/A

NOEL: 250 mg/kg Probit Slope: N/A

14. **REVIEWER'S COMMENTS:** This study does not fulfill the guideline requirement for an acute oral toxicity test using mallard duck. Several birds in the three highest treatment groups vomited within an hour of dosing. Therefore, an accurate LD_{50} could not be determined. An LD_{50} of >250 mg/kg classifies azoxystrobin as no more than moderately toxic to mallard ducks.