

US EPA ARCHIVE DOCUMENT

DP Barcode: D240854

MRID No.: 443874-07

**DATA EVALUATION RECORD**  
**§ 71-1(A) - AVIAN SINGLE-DOSE LD<sub>50</sub> TEST**

1. **CHEMICAL:** Cloquintocet-mexyl PC Code No.: 999999

2. **TEST MATERIAL:** CGA-185072 Purity: 91.6%

3. **CITATION**

Authors: B.Hakin, A.J.Norman, A.Anderson, and I.S.Dawe

Title: Acute Oral Toxicity of CGA-185072 to the Mallard Duck

Study Completion Date: March 2, 1989

Laboratory: Huntington Research Centre, Ltd.

P.O. Box 2

Huntington, Cambridgeshire, PE18 6ES, England

Sponsor: Novartis Crop Protection, Inc.

P.O. Box 18300

Greensboro, NC 27419

Laboratory Report ID: CBG 472/89311

MRID No.: 443874-07

4. **REVIEWED BY:** Stephen Carey, Biologist, ERBIII, EFED

Signature: *Stephen Carey*

Date: 11/19/98

5. **APPROVED BY:** Harry Craven, ERBIII, EFED

Signature: *Harry Craven*

Date: 11/19/98

6. **STUDY PARAMETERS**

**Scientific Name of Test Organism:** *Anas platyrhynchos*

**Test Organisms Age/Size:** ~16 week of age

**Definitive Study Duration:** 14 days

7. **CONCLUSIONS:**

**Results Synopsis**

LD<sub>50</sub>: >2000 mg ai/kg

95% C.I.: N/A

NOEL: 2000 mg ai/kg

Probit Slope: N/A

US EPA ARCHIVE DOCUMENT



2008639

**8. ADEQUACY OF THE STUDY**

**A. Classification:** Core

**B. Rationale:** N/A

**C. Repairability:** N/A

**9. GUIDELINE DEVIATIONS**

1. N/A

2. N/A

**10. SUBMISSION PURPOSE:**

**11. MATERIALS AND METHODS**

**A. Test Organisms**

Guideline Criteria	Reported Information
<b>Species:</b> A wild waterfowl species, preferably the mallard ( <i>Anas platyrhynchos</i> ), or an upland game bird species, preferably the bobwhite ( <i>Colinus virginianus</i> ).	<i>Anas platyrhynchos</i>
<b>Age at beginning of test:</b> At least 16 weeks old.	~16 weeks old
<b>Supplier</b>	Mr. J. Coles The County Game Farms Ashford, Kent, England
<b>Acclimation period:</b> At least 15 days.	14 days

**B. Test System**

Guideline Criteria	Reported Information
<b>Pen facilities adequate?</b>	Yes
<b>Photoperiod:</b> 10-h light, 14-h dark is recommended.	7-h light, 17-h dark
<b>Diet was nutritious and appropriate for species?</b>	Yes
<b>Feed withheld at least 15 hours prior to dosing?</b>	Yes

### C. Test Design

Guideline Criteria	Reported Information
<b>Range finding test?</b>	Yes
<b>Definitive Test</b> <b>Nominal concentrations:</b> At least five, in a geometric scale, unless $LD_{50} > 2000$ mg ai / kg.	Three dose levels of 500, 1000, and 2000 were used. The resulting $LD_{50}$ was greater than 2000 mg ai/kg.
<b>Controls:</b> Water control or vehicle control (if vehicle is used)	Vehicle control
<b>Number of birds per group:</b> 10 (strongly recommended)	10
<b>Vehicle:</b> Distilled water, corn oil, propylene glycol, 1% carboxymethylcellulose, or gum arabic.	Corn oil
<b>Amount of vehicle per body weight:</b> Constant volume/weight % of body weight, not to exceed 1% (1ml/100g).	5 ml/kg
<b>Observations period:</b> At least 14 days.	14 days

**12. REPORTED RESULTS**

Guideline Criteria	Reported Information
<b>Quality assurance and GLP compliance statements were included in the report?</b>	Yes
<b>Individual body weights measured at beginning of test, on day 14 and at end of test if extended beyond 14 days?</b>	Yes
<b>Mean feed consumption measured at beginning of test, on day 14, and at end of test if extended beyond 14 days?</b>	Yes
<b>Control Mortality:</b> Not more than 10%	0 %
<b>Raw data included?</b>	Yes
<b>Signs of toxicity (if any) were described?</b>	No

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
500	10	0	0	0	0	0	0	0	0
1000	10	0	0	0	0	0	0	0	0
2000	10	0	0	0	0	0	0	0	0

DP Barcode: D240854

MRID No.: 443874-07

Other Significant Results: None

Reported Statistical Results

Statistical Method:

LD<sub>50</sub>: >2000 mg ai/kg      95% C.I.: N/A

NOEL: 2000 mg ai/kg      Probit Slope: N/A

**13. Verification of Statistical Results**

Statistical Method: visual estimation

LD<sub>50</sub>: >2000 mg ai/kg      95% C.I.: N/A

NOEL: 2000 mg ai/kg      Probit Slope: N/A

**15. REVIEWER'S COMMENTS:** This study is scientifically sound and fulfills the guideline requirements for an acute oral LD50 test using Mallard duck. Based on mean measured concentrations, the 14-day LD50 was determined to be greater than 2000 mg ai/kg, which classifies CGA-185072 as practically non-toxic to the mallard. The NOEC was determined to be 2000 mg ai/kg. This study is classified as **Core**.