

US EPA ARCHIVE DOCUMENT

DP Barcode: D240854

MRID No.: 443874-08

**DATA EVALUATION RECORD**  
**§ 71-2(B) -- WATERFOWL DIETARY LC<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, M.H.Rodgers, A.Anderson, and I.S.Dawe.

Title: The Subacute Dietary Toxicity of CGA-185072 to the Mallard duck.

Study Completion Date: January 14, 1989

Laboratory: Huntingdon Research Centre, Ltd.  
P.O. Box 2  
Huntingdon, Cambridgeshire, PE18 6ES,  
England

Sponsor: Novartis Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419

Laboratory Report ID: CBG 470/89102

MRID No.: 443874-08

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

Signature: *Stephen Carey*

Date: 12/1/98

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

Signature: *Henry Craven*

Date: 12/25/98

6. **STUDY PARAMETERS**

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

**Age of Test Organisms at Test Initiation:** 10 days old

**Definitive Study Duration:** 3-day pre-treatment period

5-day treatment period

3-day post-treatment period



2008638

**7. CONCLUSIONS:**

**Results Synopsis**

LC<sub>50</sub>: >5310 ppm ai

NOEL: 5310 ppm ai

95% C.I.: N/A

Probit Slope: N/A

**8. ADEQUACY OF THE STUDY**

**A. Classification:** Core

**B. Rationale:** N/A

**C. Repairability:** N/A

**9. GUIDELINE DEVIATIONS**

1. N/A

**10. SUBMISSION PURPOSE:**

**11. MATERIALS AND METHODS**

**A. Test Organisms**

Guideline Criteria	Reported Information
<p><b>Species:</b> A wild waterfowl species, preferably the mallard (<i>Anas platyrhynchos</i>).</p>	<p><i>Anas platyrhynchos</i></p>
<p><b>Age at beginning of test:</b> 5-10 days old (preferably 5).</p>	<p>10 days old</p>
<p><b>Supplier</b></p>	<p>Mr. John Coles The County Game Farms, Home Farm Hothfield, Ashford, Kent</p>

Guideline Criteria	Reported Information
<b>Chicks appeared healthy and did not have excessive mortality before the test?</b>	Yes
<b>Acclimation period:</b> As long as possible.	7 days

### B. Test System

Guideline Criteria	Reported Information
<b>Pen size:</b> about 70 x 100 x 24 cm	80 x 36 x 30 cm
<b>Brooder temperature:</b> about 35°C (95°F)	Not Reported
<b>Room temperature:</b> 22-27°C (71-81°F)	28-31°C
<b>Relative humidity:</b> 30-80%	47%
<b>Adequate ventilation?</b>	Yes
<b>Photoperiod</b> Minimum of 14 h of light.	Not Reported
<b>Diet:</b> A commercial waterfowl feed.	Basal diet

### C. Test Design

Guideline Criteria	Reported Information
<b>Range finding test?</b>	No

Guideline Criteria	Reported Information
<p><b>Definitive Test</b>  <b>Nominal concentrations:</b>                      Four minimum, 5 or 6 strongly recommended, in a geometric scale, unless <math>LC_{50} &gt; 5000</math> ppm.</p>	<p><math>LC_{50} &gt; 5200</math> ppm.                      Concentrations: Control, 163, 325, 650, 1300, 2600, and 5200 ppm.</p>
<p><b>Controls:</b>                      Control group tested with diet containing the maximum amount of vehicle used in treated diets?</p>	<p>Not Reported</p>
<p><b>Number of birds per group:</b>                      10 (strongly recommended)</p>	<p>10</p>
<p><b>Vehicle:</b>                      Distilled water, corn oil, propylene glycol, 1% carboxymethylcellulose, or gum arabic.</p>	<p>Corn oil</p>
<p><b>Vehicle amount (% of diet by weight):</b>                      Not more than 2%.</p>	<p>Not Reported</p>
<p><b>Test durations:</b>                      5 days with treated feed and at least 3 days observation with "clean" feed.</p>	<p>5-day treatment period                      3-day post-treatment period</p>
<p><b>No mortality during last 72 hr of observations?</b></p>	<p>No</p>

**12. REPORTED RESULTS**

Guideline Criteria	Reported Information
<p><b>Quality assurance and GLP compliance statements were included in the report?</b></p>	<p>Yes</p>
<p><b>Body weights measured at beginning and end?</b></p>	<p>Yes</p>

Guideline Criteria	Reported Information
<b>Estimated consumption per pen reported for pretreatment, treatment, and observation periods?</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

Group	Conc. (ppm)		No. of Birds	Cumulative Number of Dead								
	Nominal	Mean Measured		Day of Study								
				1	2	3	4	5	6	7	8	
Control	0	ND	10	0	0	0	0	0	0	0	0	0
4	163	161	10	0	0	0	0	0	0	0	0	0
5	325	317	10	0	0	0	0	0	0	0	0	0
6	650	642	10	0	0	0	0	0	0	0	0	0
7	1300	1240	10	0	0	0	0	0	0	0	0	0
8	2600	2590	10	0	0	0	0	0	0	0	0	0
9	5200	5310	10	0	0	0	0	0	0	0	0	0

Other Significant Results: The food consumption and body weight gain was unaffected in the study.

### Statistical Results

Statistical Method: Visual estimation

LC<sub>50</sub>: >5200 ppm      95% C.I.: N/A  
NOEL: 5200 ppm      Probit Slope: N/A

### **13. Verification of Statistical Results**

Statistical Method: Visual estimation

LC<sub>50</sub>: >5310 ppm  
NOEL >5310 ppm

**14. REVIEWER'S COMMENTS:** This study is scientifically sound and fulfills the guideline requirements for a subacute dietary toxicity test using mallard duck. Based on mean measured concentrations, the 5-day LC50 was determined to be >5310 ppm, which classifies CGA-185072 as practically non-toxic to the duck. The NOEC was determined to be 5310 ppm. Data on the test organism's brooder temperature, photoperiod, test with diet containing the maximum amount of vehicle used in treated diets, and vehicle amount are not reported in the study. Although, this is not crucial since there was no mortality reported in this study. This study is classified as **core**.