Text Searchable Document

MRID No. 438698-02

DATA EVALUATION RECORD § 71-2(A) -- UPLAND GAME BIRD DIETARY LC₅₀ TEST

1.	CHEMICAL:	Captan		PC Code No.	: 081301
2.	TEST MATER	IAL: Cap	otan Technica	l <u>Purity</u>	: 90%
з.	CITATION:				
	1	<u>Authors</u> :	B. Hakin, A I.S. Dawe	.J. Johnson, A.	Anderson, and
		<u>Title</u> :	Captan: Die with the Bo	tary Toxicity (L bwhite Quail	C ₅₀) Study
<u>Stu</u>	dy Completio	on Date:	November 28	, 1990	
		pratory:	Huntingdon	Research Centre	Ltd.,
	5	Sponsor:	Zeneca Inc.	campingeshire,	0
La	boratory Rep	port ID:	ISN 230/901	123	
	<u>M</u>	RID No.:	438698-02		
	<u>DP</u>	Barcode:	Not availab	le.	
4.	<u>REVIEWED B</u> Scientist,	KBN Engi	ry Graham Mc neering and	ra, M.S., Enviro Applied Sciences	nmental , Inc.
	Signature:	My	- tula	FARGA D	ate: 4/2/96
	APPROVED BY Engineering	<u>¥</u> : Pim Ko y and App	salwat, Ph.D lied Science	., Senior Scient s, Inc.	ist, KBN
	Signature:	P.Kos	alwat	D	ate: 4/2/96
5.	APPROVED BY	K:			
	Signature:	pa	y craw	D	ate: 6/6/96
6.	STUDY PARAN	<u>METERS</u> :			
	Scientific Age of Test	Name of t Organis	Test Organis ms at Test I	m: Colinus virg nitiation: 11 d	inianus ays old

7. <u>CONCLUSIONS</u>: This study is scientifically sound and meets the guideline requirements for an acute avian dietary toxicity study using bobwhite quail. The LC_{50} was >5200 ppm nominal, which classifies the test material as practically non-toxic to the bobwhite quail. The NOEC was 1300 ppm nominal since no birds at or below this test level demonstrated signs of toxicity during the study.

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Results Synopsis LC₅₀: >5200 ppm NOEC: 1300 ppm

Definitive Study Duration: 8 days

95% C.I.: N/A Probit Slope: N/A



- 8. ADEQUACY OF THE STUDY:
 - A. Classification: Core
 - B. Rationale: Fulfills requirements.
 - C. Repairability: N/A
- 9. <u>GUIDELINE DEVIATIONS</u>: The brooder temperature was not reported. The guidelines recommend a brooder temperature of 35°C.

10. <u>SUBMISSION PURPOSE</u>:

11. MATERIALS AND METHODS:

A. Test Organisms

Guideline Criteria	Reported Information			
Species: An upland game bird species, preferably the bobwhite (<i>Colinus virginianus</i>).	Colinus virginianus			
Age at beginning of test: 10-14 days old.	11 days old			
Supplier	D.R. and R.E. Wise, Monkfield, Bourn, England			
Chicks appeared healthy and did not have excessive mortality before the test?	Not reported.			
Acclimation period: As long as possible.	10 days			

B. Test System

Guideline Criteria	Reported Information				
Pen size: about 35 x 100 x 24 cm	83 X 52 X 51 cm				
Brooder temperature: about 35°C (95°F)	Not reported. A 300-watt infra-red lamp was suspended over each pen to provide additional heat.				

Guideline Criteria	Reported Information				
Room temperature: 22-27°C (71-81°F)	Minimum: 25 ±1.6°C Maximum: 28 ±1.4°C				
Relative humidity: 30-80%	49 ±4%				
Adequate ventilation?	Yes				
Photoperiod Minimum of 14 h of light.	Continuous light				
Diet: A commercial diet for game birds.	Standard HRC chick diet in meal form				

C. Test Design

Guideline Criteria	Reported Information					
Range finding test?	None reported.					
Definitive Test Nominal concentrations: Four minimum, 5 or 6 strongly recommended, in a geometric scale, unless LC ₅₀ > 5000 ppm.	163, 325, 650, 1300, 2600, and 5200 ppm (not corrected for purity).					
Controls: Control group tested with diet containing the maximum amount of vehicle used in treated diets?	Yes. Three control groups were used.					
Number of birds per group: 10 (strongly recommended)	10 birds per group					
Vehicle: Distilled water, corn oil, propylene glycol, 1% carboxymethyl cellulose, or gum arabic.	None					
Vehicle amount (% of diet by weight): Not more than 2%	N/A					

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Guideline Criteria	Reported Information				
Test durations: 5 days with treated feed and at least 3 days observation with "clean" feed.	3 days pretreatment 5 days with treated diet 3 days observation period				
No mortality during last 72 hr of observations?	No mortality occurred during the last 72 hours of observation.				

12. <u>REPORTED RESULTS</u>:

Guideline Criteria	Reported Information
Quality assurance and GLP compliance statements were included in the report?	Yes
Body weights measured at beginning and end of study?	Group mean body weights were recorded 3 days prior to test initiation, at test initiation and Days 5 and 8.
Estimated consumption per pen reported for pretreatment, treatment, and observation periods?	Yes
Control Mortality: Not more than 10%	Only one bird in the second control group died on Day 4.
Raw data included?	Yes
Signs of toxicity (if any) were described?	None

<u>Mortality</u>

Conc. (ppm)			Cumulative Number of Dead							
		No.	Day of Study							
Nominal	Mean Measured	of Birds	1	2	3	4	5	6	7	8
Controls	<12	30	0	0	0	1	1	1	1	1
163	159	10	0	0	0	0	0	0	0	0
325	321	10	0	0	0	0	0	0	0	0

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Conc.	No.	Cumulative Number of Dead								
Mean Nominal Measured		Day of Study								
	Mean Measured	of Birds	1	2	3	4	5	6	7	8
650	660	10	0	0	0	0	0	0	0	0
1300	1230	10	0	0	0	0	0	0	0	0
2600	2610	10	0	0	0	0	0	0	0	0
5200	5180	10	1	1	1	3	3	3	3	3

<u>Other Significant Results:</u> There was a reduction in food consumption and body weight gain in birds exposed to diet concentrations of 2600 and 5200 ppm during the exposure period.

Statistical Results

Statistical Method:Visual inspectionLC50:>5200 ppm95% C.I.: N/ANOEL:1300 ppmProbit Slope: N/A

13. <u>Verification of Statistical Results</u>:

Statistical Method:Visual inspectionLC50:>5200 ppm95% C.I.: N/ANOEL:1300 ppmProbit Slope: N/A

14. <u>REVIEWER'S COMMENTS</u>: This study is scientifically sound and meets the guideline requirements for an acute avian dietary toxicity study using bobwhite quail. The LC₅₀ was >5200 ppm nominal, which classifies the test material as practically non-toxic to the bobwhite quail. The NOEC was 1300 ppm nominal since no birds at or below this test level demonstrated signs of toxicity during the study. This study is classified as Core.

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