

Chemical Name: Diphenyl cresyl phosphate  
Trade Name(s): Kronitex CDP  
CAS No: 26444-49-5  
Lab Study ID No: C13A-BEIGY 49/79 IS L 15 Mar 1979

### FINAL REPORT ACTION ITEM CHECK-OFF LIST

- ☐ Reviewed for possible:
  - ☐ FIFRA 6 (a) (2) and/or
  - ☐ TSCA Section 8 (e) reporting
- ☐ Copy of FIFRA 6 (a) (2) and/or TSCA Section 8 (e) letter to the following Agency(ies), if applicable:
  - ☐ EPA-FIFRA
  - ☐ EPA-TSCA
  - ☐ California [FIFRA 6 (a) (2)s]
  - ☐ Other States [FIFRA 6 (a) (2)s]: \_\_\_\_\_
- ☐ Confidentiality Statement page addressed, signed, and dated in FIFRA reports
- ☐ GLP Compliance page signed and dated in FIFRA reports
- ☐ Flagging Statement page addressed, signed and dated in FIFRA reports
- ☐ Copy of report submitted to the Agency(ies) in conjunction and/or support of one or more of the following:
  - ☐ TSCA Consent Order/Agreement
  - ☐ FIFRA Registration or Re-registration
  - ☐ California Registration
  - ☐ EU Notification
  - ☐ Japanese MITI Notification
  - ☐ Japanese MAFF Notification
  - ☐ Canadian (DSL) Notification
  - ☐ FIFRA 6 (a) (2) Submission
  - ☐ TSCA 8 (e) Submission
  - ☐ TSCA 8 (d) Data-Call-In
  - ☐ PMN Submission
  - ☐ Other: \_\_\_\_\_
- ☒ All information regarding the chemical and the study report entered into the IUCLID Toxicity Data Base
- ☒ Study Report reviewed for MSDS information *Already on MSDS*
- ☒ Copy of Cover & Summary report pages to Business Unit MSDS information center (domestic and international)
- ☐ Active Study file merged with final report in Regulatory Affairs file room

*on MSDS*

TOX K)

✓  
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CIBA-GEIGY Pharmaceuticals Division  
STAMFORD LODGE UK  
PHARMA TOXICOLOGY

49/79/S.L.  
CONFIDENTIAL

CIBA-GEIGY P & A CO. CENTRAL TECHNICAL REFERENCE		
Acc. No.	Ret. No. SAF/1680	
Date Rec'd	Pages	Issued to

p-CRESTYL DIETHYL PHOSPHATE

LIC 124/47

Delayed Neurotoxicity in  
Domestic Hens (ED<sub>50</sub>)

N.B.

↓  
(2500 ppm o.w.p)  
— could be enough  
to account for  
observed effect —  
comment, pending results  
on dilution(s) of o.w.p  
in the TAPP

23/3/79

ASJ

15th March, 1979.

RECEIVED  
18 AUG 1978  
1011

A. J. Duke  
Trafford Park

Toxicology tests  
required and  
species of animals  
to be used

Chicken neurotoxicity, single doses of  
200 mg/kg  $\pm$  2 g/kg. Please report any  
positive clinical observations, as soon as noted.

Chemical name  
and formula

LIC 124/47

( $<0.01\%$

By GLC - 97.4% p-cresyl diphenyl phosphate  
0.3% triphenyl phosphate  
2.3% bis-(p-cresyl) phenyl phosphate

o-cresyl  
diphenyl  
phosphate)

Intended use

Reference sample, minor component of triaryl  
phosphate products

Other relevant information  
i.e. possible hazards,  
toxicity of similar  
chemicals if known, etc.

None known: Possible neurotoxicity  
speculated by analogy with p-ethyl  
phenyl phosphates

Lab. Notebook No.  
or Plant batch No.

v.i.

To whom report is to  
be sent

A. J. Duke  
Dr. H. Fletcher  
~~Heald Green~~ Trafford Park

Date chemical to be sent to  
Stamford Lodge and amount

16/8/78  
ca. 300 g.

Date:

16/8/78

Signed:

A. J. Duke

Test Substance : LIC 124/47

Description of Study : Delayed Neurotoxicity in Domestic Hens (ED<sub>50</sub>)

Study Sponsor : CIBA-GEIGY (U.K.) Ltd.,  
 Tenax Road,  
 Trafford Park.  
 Industrial Chemicals Division

Testing Facility : CIBA-GEIGY Pharmaceuticals Division  
 Stamford Lodge  
 Wilmslow  
 Cheshire UK  
 Pharma Toxicology


Test No. : 7154 78


Experimental No. : 78C03

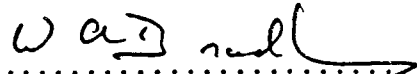
Starting Date : 21.8.78

Finishing Date : 29.1.79

Location of Raw Data : As for testing facility

Study Director :  ..... 15.3.79  
 (W. A. Bradley, BVSc, MRCVS)

Responsible for conduct  
 of animals studies :  ..... 15.3.79  
 (K. O'Brien, AIAT)

Head of Toxicology,  
 CIBA-GEIGY :  ..... 15.3.79  
 Pharmaceuticals Division  
 Stamford Lodge  
 Wilmslow  
 Cheshire UK (W. A. Bradley, BVSc, MRCVS)

ASSESSMENT

The median oral effective dose ( $ED_{50}$ ) for delayed neurotoxicity in hens with LIC 124/47 was 1.70g/kg body weight (95% confidence limits 1.18 and 2.31g/kg).

## EXPERIMENTAL PROCEDURE

### Hens

A hybrid heavy variety of Rhode Island Red x Light Sussex hens with a mean body weight of 2.44kg were used. All birds had been purchased at 'end of lay' and had been maintained on the premises for at least 6 months and were between 2 - 3 years old. All were clinically healthy at the start of the test.

### Husbandry

Twelve birds were placed in one pen 2 weeks prior to the start of the test.

All birds were allowed access to a commercial diet (BOCM SILCOCK, MANDEVILLE BLUE, LAYERS MEAL), limestone grit and water on an ad lib basis.

### Compound

A clear liquid labelled LIC 124/47\*

### Administration of Compound

The compound, as supplied was administered as a single dose by gavage into the crop, at the required dose level.

The hens were divided into 2 series of 6 birds in each (an odd numbered and an even numbered series). Two hens, one from each series, were dosed initially and then depending on the clinical symptoms seen a further 2 hens were dosed 21 days later with either an increased dosage (no clinical symptoms in preceding hen in series) or a reduced dosage (clinical symptoms in preceding hen in the series). This was repeated until 6 hens had been dosed in each series.

\*Label not legible

SUMMARY OF RESULTSClinical and Pathological Findings

Hen No.	Dose (g/kg)	Day	Symptoms
11	2.0	11	Ataxia.
		15	Severe ataxia.
		21	No change. Hen killed.
21	1.25	21	No symptoms. Hen killed.
31	2.0	21	No symptoms. Hen killed.
41	3.0	14	Slight ataxia.
		21	Ataxia. Hen killed.
51	2.0	13	Slight ataxia.
		21	No change. Hen killed.
61	1.25	21	No symptoms. Hen killed.
12	2.0	11	Ataxia.
		14	Severe ataxia. Hen killed.
22	1.25	21	No symptoms. Hen killed.
32	2.0	10	Slight ataxia.
		21	Ataxia. Hen killed.
42	1.25	21	No symptoms. Hen killed.
52	2.0	12	Ataxia.
		21	No change. Hen killed.
62	1.25	21	No symptoms. Hen killed.

INDIVIDUAL BODY WEIGHTS AT THE TIME OF DOSING

Hen No.	Body Weight (kg)	Hen No.	Body Weight (kg)
11	2.20	12	2.60
21	2.45	22	2.45
31	2.70	32	2.50
41	2.40	42	2.70
51	2.45	52	2.35
61	2.25	62	2.25
	—		—
Mean	2.41	Mean	2.48
	—		—



# ACUTE TOXICITY

DATE 21-8-78

Species HEN

Route ORAL

Compound LIC 124/47

Exp. No. 78CO3

Series 1		Series 2		Series 3		Series 4	
E*	Dose g/kg	E*	Dose g/kg	E*	Dose /kg	E*	Dose /kg
1	2.0	12	2.0	0		0	
1	1.25	12	1.25	1		1	
1	2.0	32	2.0	2		2	
1	3.0	42	1.25	3		3	
1	2.0	52	2.0	4		4	
1	1.25	62	1.25	5		5	
1	2.0		2.0	6		6	
				7		7	
				8		8	
				9		9	
Sum		Sum		Sum		Sum	
Mean		Mean		Mean		Mean	

Series 1		Series 2		Series 3		Series 4	
E*	Dose g/kg	E*	Dose g/kg	E*	Dose /kg	E*	Dose /kg
1	2.0	12	2.0	0		0	
1	1.25	12	1.25	1		1	
1	2.0	32	2.0	2		2	
1	3.0	42	1.25	3		3	
1	2.0	52	2.0	4		4	
1	1.25	62	1.25	5		5	
1	2.0		2.0	6		6	
				7		7	
				8		8	
				9		9	
Sum		Sum		Sum		Sum	
Mean		Mean		Mean		Mean	

Series 1		Series 2		Series 3		Series 4	
E*	Dose g/kg	E*	Dose g/kg	E*	Dose /kg	E*	Dose /kg
1	2.0	12	2.0	0		0	
1	1.25	12	1.25	1		1	
1	2.0	32	2.0	2		2	
1	3.0	42	1.25	3		3	
1	2.0	52	2.0	4		4	
1	1.25	62	1.25	5		5	
1	2.0		2.0	6		6	
				7		7	
				8		8	
				9		9	
Sum		Sum		Sum		Sum	
Mean		Mean		Mean		Mean	

Series 1		Series 2		Series 3		Series 4	
E*	Dose g/kg	E*	Dose g/kg	E*	Dose /kg	E*	Dose /kg
1	2.0	12	2.0	0		0	
1	1.25	12	1.25	1		1	
1	2.0	32	2.0	2		2	
1	3.0	42	1.25	3		3	
1	2.0	52	2.0	4		4	
1	1.25	62	1.25	5		5	
1	2.0		2.0	6		6	
				7		7	
				8		8	
				9		9	
Sum		Sum		Sum		Sum	
Mean		Mean		Mean		Mean	

Mean Log Dose

Series 3+4 Sum of Log Doses

Mean Log Dose 0.2306

Series 1+2 Sum of Log Doses 2.7676

Mean Dose

Mean Dose

Mean Dose 1.70g/kg

Series 1+2+3+4 Sum of Log Doses

Mean Log Dose

Series 1+2+3+4 Sum of Log Doses

95% Confidence Limits 1.18 and 2.31g/kg

LD<sub>50</sub> 1.70g/kg

+ = Animal Ataxic  
- = Animal Normal

\*E = Result of Experiment

\*E = Hen No.