

US EPA ARCHIVE DOCUMENT

CASE GS0315

LINDANE

PM PM# 04/05/84

CHEM 009001

Lindane ( gamma isomer of benzene hexac

BRANCH EEB DISC 40 TOPIC 05050542

FORMULATION 00 - ACTIVE INGREDIENT

FICHE/MASTER ID 00020560

CONTENT CAT 02

Schafer, E.W. (1972) The acute oral toxicity of 369 pesticidal, pharmaceutical and other chemicals to wild birds. Toxicology and Applied Pharmacology 21(? ):315-330. (Also "In" unpublished submission received Apr 25, 1978 under 476-2180; submitted by Stauffer Chemical Co., Richmond, Calif.; CDL:233577-C)

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS

SEC: TOX -40-05050521

DIRECT RVW TIME = 1 (MH) START-DATE 5/8/85 END DATE 5/8/85

REVIEWED BY: Ann Stavola  
TITLE: Aquatic Biologist  
ORG: EEB/HED  
LOC/TEL: CMA-801 557 560

SIGNATURE: Ann Stavola DATE: 5/8/85

APPROVED BY:  
TITLE: Section Chief  
ORG: EEB  
LOC/TEL:

SIGNATURE: Henry Z. Craven DATE: 6/6/85

There is insufficient data to validate this study. However EEB accepts Schafer's report as Supplemental - the study is Scientifically Sound but does not meet our guidelines requirements for an avian acute oral study. The following LD50 values for lindane are reported:

Starling 100 mg/kg  
Redwing 75 mg/kg  
rat 170 mg/kg

Lindane is moderately toxic on an acute basis to songbirds and mammals.

TABLE 1—continued

Chemical No.	American Chemical Society Name (common or other identification)*	Starting		Redwing		Rat LD50 (mg/kg)
		LD50 (mg/kg)	95% CL (mg/kg)	LD50 (mg/kg)	95% CL (mg/kg)	
52.	Carbamic acid, methyl-, 4-methylthio- <i>m</i> -tolyl ester (Bay 32651)	57*	28-100	67*	50-90	50
53.	Carbamic acid, methyl-, 4-(methylthio)-3,5-xylol ester (Methiocarb)	13*	—	4.6	2.7-6.9	132
54.	Carbamic acid, methyl-, 1-naphthyl ester (Sevin)	—	—	56	32-100	600
55.	Carbamic acid, methyl-, <i>m</i> -(2-propionyloxy)phenyl ester (Hercules 8717)	150	47-470	15	4.7-47	150
56.	Carbamic acid, methyl-, <i>o</i> -(2-propionyloxy)phenyl ester (Hercules 9699)	45	—	45	—	80
57.	Carbamic acid, methyl-, 3-tolyl ester	>100	—	100	56-178	—
58.	Carbamic acid, methyl-, 2,3,4-trimethylphenyl ester (SD 8786)	>100	—	42	—	318
59.	Carbamic acid, methyl-, 3,4,5-trimethylphenyl ester (SD 8530)	>100	—	10	5.6-18	178
60.	Carbamic acid, methyl-, 3,5-xylol ester	>100	—	75	—	—
61.	Cinchonamide, 2-butoxy <i>N</i> -(2-(diethylamino)ethyl) hydrochloride (Dibucaine)	100	56-178	42	—	—
62.	Crotonic acid, 3-chloro-7-hydroxy-4-methyl, <i>O</i> -ester with <i>O</i> , <i>O</i> -diethyl phosphorothioate (Cumaphos)	32*	—	3.5*	—	125
63.	Crotonic acid, 3-hydroxy-, methyl ester dimethyl phosphate (Phosdram)	3.9*	—	—	—	4
64.	Cyclohexane, 1,2,3,4,5,6-hexachloro (Lindane)	100	—	75	—	170
65.	Cyclopentane, 1,3-dithionyl fluoride (Phillips 2133)	1.3	—	2.1	1.2-4.0	7.9
66.	Diethylammoniumethyl chloride hydrochloride	100	56-178	42	24-75	—
67.	1,4:5:8-Dimethanomonophthalene, 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8a-octahydro endo,endo-(F-indin)	2.4	—	2.4	—	10-12
68.	1,4:5:8-Dimethanomonophthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro (Aldrin)	7.2	—	—	—	67
69.	1,4:5:8-Dimethanomonophthalazine, 5,6,7,8,9,9a-hexachloro-1,4,4a,5,8,8a-hexahydro-, 2-oxide (S13 3450)	—	—	<25	—	2.8
70.	Dipyrrolidone, 1,1'-(2-butynylene) (Tremorine)	>100	—	100	56-178	—
71.	$\alpha$ -D-Glucosylgalactose ( $\alpha$ -Chloritose)	75	—	32	18-56	400

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