

US EPA ARCHIVE DOCUMENT

114501

with (3)

Validation Sheet

Formulation: UC 51762 - Technical grade 99%

Chemical Name(s): Thiodicarb (Larvin)

Validator: Alvaro A. Yamhure

Date: 11/21/80

Test Type: Fish - Bluegill sunfish
96-hours LC50

Test I.D.: Test Dates 18-22 August, 1979 Union Carbide Corp.
Environmental Services (UCCES) Project No. 11504-25-07-
Jesse Seminara, Scientific Investigator

Citation: Seminara, Jesse 1980 (4/16/80).
UCCES Project No. 11504-25-07.

Validation Category: Core

Results:

<u>Species</u>	<u>Test Type</u>	<u>(95%) Confidence Limits</u>
Bluegill sunfish	96-hour LC50 of 1.21 ppm	(1.03 - 1.41 ppm)

Validation Category Rational: Meets All of EPA's requirements

\$17.50
row 6 Meyssame

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80/11/19 12.28.27. TERMINAL: 34, P 30
UOFM CYBER 74 NOS 1.3 (11/13-BO).
USER NUMBER: zzz6944,usepa
TERMINAL: 34, P 30/TTY
USERS, TYPE *WRITEUP(NOTE)* 80/11/17.
RECOVER /SYSTEM: basic,old,s79lc50
READY.
9000 data 5
9001 data 3.20,1.80,1.0,0.56,0.32
9002 data 10,10,10,10,10
9003 data 10,10,2,0,0
run

Blue gill sunfish
LARVIN 99% a.i (Thiodicarb)

80/11/19. 12.31.27.
BASIC PROGRAM S79LC50

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CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
3.2	10	10	100	9.76563E-2
1.8	10	10	100	9.76563E-2
1	10	2	20.	5.46875
.56	10	0	0	9.76563E-2
.32	10	0	0	9.76563E-2

THE BINOMIAL TEST SHOWS THAT .56 AND 1.8 CAN BE
USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT
CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL
ASSOCIATED WITH THESE LIMITS IS GREATER THAN 95 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 1.20322

WHEN THERE ARE LESS THAN TWO CONCENTRATIONS AT WHICH THE PERCENT
DEAD IS BETWEEN 0 AND 100, NEITHER THE MOVING AVERAGE NOR THE
ROBIT METHOD CAN GIVE ANY STATISTICALLY SOUND RESULTS.

80/11/20. 07.55.45. TERMINAL: 24, P 20
 UOFM CYBER 74 NOS 1.3 (11/13-BO).
 USER NUMBER: ZZZ6944, USEPA
 TERMINAL: 24, P 20/TTY
 USERS, TYPE: *WRITEUP(NOTE)*: 80/11/17.
 RECOVER / SYSTEM: BASIC, OLD, S79LC50
 READY.
 9000 DATA 5
 9001 DATA 3.20, 1.80, 1.0, 0.56, 0.32
 9002 DATA 10, 10, 10, 10, 10
 9003 DATA 10, 9, 2, 0, 0
 RUN

80/11/20. 07.58.25.
 BASIC PROGRAM S79LC50

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
3.2	10	10	100	9.76563E-2
1.8	10	9	90	1.07422
1	10	2	20	5.46875
.56	10	0	0	9.76563E-2
.32	10	0	0	9.76563E-2

THE BINOMIAL TEST SHOWS THAT .56 AND 1.8 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS GREATER THAN 95 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 1.27509

-----RESULTS CALCULATED USING THE MOVING AVERAGE METHOD
 SPAN G LC50 95 PERCENT CONFIDENCE LIMITS
 4 .110084 LC50 1.26477 .979863 1.72882

Handwritten notes:
 All significant data
 Blue grid with LC50
 A series of grid values of 1.8
 As expected 100% of by 9.76563E-2
 beyond 2% and by 5.46875
 number of 100% of by 9.76563E-2
 number of 100% of by 9.76563E-2

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