

3-13-79

X
Nto

Validation Sheet

Formulation: assumed to be 100% a.i.
 Chemical Name: San 326 10G
 Validator: Ray Matheny
 Date: 3/13/79
 Test Type: Fish Acute 96 hr. LC₅₀
 Test I.D. #: UCES Project #: 11506-16-03
 Citation: Calmbacher, C. W. 1978. Acute Toxicity of San 326 I
 Lot #7801 to Bluegill Sunfish, Lepomis macrochirus
 Prepared for Sandoz, Inc. by Union Carbide Environ-
 mental Services. (pg. 0083 within Accession No. 097840).

Validation Category: Core

Result:	<u>Species</u>	<u>Test</u> 96 hr. LC ₅₀	<u>Confidence Limits</u>
	Bluegill sunfish	0.07 mg/l*	(0.05 - 0.11 mg/l)

* Using the Spearman-Kärber Estimator

This test with the T.I. 59 Computer, resulted in an LC₅₀
 value of 0.13 with no confidence limits determined.

Validation Category Rationale: the test was conducted in accordance with
 standard procedures though the identical
 LC₅₀, as determined by the registrant, was
 not attained (0.07 vs 0.13 mg/l).

Category Repairability/Rationale: NA

72-1

1/3/79
D/302

Abstract:

Standard test procedures were used:

Five groups of bluegill sunfish were tested at 0.018, 0.032, .056, 0.1 and 0.18 ppm. Mortalities were 0,0, 0,0, and 10, respectively. Test solution temperatures ranged from 20.0°C to 21.2°C. Dissolved O₂ varied from 9.2 to 7.5 mg/l., while pH ranged 7.32 to 7.39.

San 326 I- 3/12/79

Bluegill Sunfish
LC₅₀ - 96 hr.

9000 data 5
9001 data 0.180,0.100,0.056,0.032,0.018
9002 data 10,10,10,10,10
9003 data 10,0,0,0,0
run

79/03/12, 13.50.18.
BASIC PROGRAM A78LC50

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*****
ONC.      NUMBER      NUMBER      PERCENT      BINOMIAL
          EXPOSED      DEAD        DEAD        PROB. (PERCENT)
.18       10          10          100          9.76563E-2
.1         10          0           0           9.76563E-2
.056       10          0           0           9.76563E-2
.032       10          0           0           9.76563E-2
.018       10          0           0           9.76563E-2
*****
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THE BINOMIAL TEST SHOWS THAT .1 AND .18 CAN BE
USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT
CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL
ASSOCIATED WITH THESE LIMITS IS 99.8047 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 134164

See Spearman
Kerber test
attached -

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

Spearman - Karber test : Bluegill Sunfish LC_{50} - 96 hr.

0.018
0.
10.

0.032
0.
10.

0.056
0.
10.

0.1
0.
10.

0.18
10.
10.

0. %TRM
0.13 LC50
NO CLS

0.018
0.
10.

0.032
0.
10.

0.056
0.
10.

0.1
0.
10.

0.18
10.
10.

→ 10. %TRM
 0.13 LC50
 NO CLS