

Validation Sheet

Core 72-1

Rainbow Trout

LC50 = 360 ppb

X

N+0

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-oz

Citation: Calmbacher, C.W. et. al. 1978. Acute Toxicity of
 San 326 I Lot. No. 7801 To the Rainbow Trout, Salmo
gairdneri Richardson. Prepared for Sandoz, Inc.
 by Union Carbide Environmental Services. (pg. 0072
 with Accession No. 097840).

Validation Category: Core

Result:	<u>Species</u>	<u>Test</u>	<u>Confidence Limits</u>
	Rainbow trout	96 hr. LC ₅₀ * 0.36 mg/l	(0.30 - 0.42 mg/l)

*As validated by the binomial test, an approximate LC₅₀
 for this data is also 0.36 mg/l (0.30 - 0.42). = 360 ppb

validation Category Rationale: Satisfies core data requirements.

Category Repairability/Rationale: NA

Abstract: Five groups of rainbow trout (@ 2 months of age were tested:
 1, 0.56, 0.32, 0.18, and 0.1 ppm. Mortalities occurred at

the 3 highest; 3, 10 and 10, respectively. Dissolved O_2 was 8.7 and the pH ranged from 7.53 to 7.41 after 96 hr. Toxic symptoms included dark discoloration, mucous shedding, gyrating, erratic and inverted swimming, gulping air and labored respiration.

9001 data 1.00, 0.56, 0.32, 0.18, 0.10
 9002 data 10, 10, 10, 10, 10
 9003 data 10, 10, 3, 0, 0
 run

3/12/79

Rainbow Trout
 96 hr. LC_{50}

79/03/12. 13.38.15.
 BASIC PROGRAM A78LC50

CONC. ppm	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
1	10	10	100	9.76563E-2
.56	10	10	100	9.76563E-2
.32	10	3	30.	17.1875
.18	10	0	0	9.76563E-2
.1	10	0	0	9.76563E-2

THE BINOMIAL TEST SHOWS THAT .18 AND .56 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 LC_{50} FOR THIS SET OF DATA IS .363605

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.
