

US EPA ARCHIVE DOCUMENT

113601

3-14-79

Validation Sheet

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Wto

Formulation: Assumed to be 100% a.i. ² 7,

Chemical Name: San 326 I

Validator: Ray Matheny

Date: 3/14/79

Test Type: Avian Subacute Dietary LC50

Test I.D. #: Project No. 131-106

Citation: Fink, R. & J. Beavers. 1978. Eight Day LC50 - Bobwhite Quail - San 326 - Final Report. Submitted to Sandoz, Inc., Wildlife International. (pg. 0052 within Accession No. 097840)

Validation Category: Core

Result:	<u>Species</u>	<u>Test LC50</u>	<u>Confidence Limits</u>
	Bobwhite Quail	138 ppm*	(106 - 180 ppm)

Using the probit method, the LC50 is verified at 138 ppm (103 - 185).

Validation Category Rationale: Satisfies core data requirements.

Category Repariability/Rationale: NA

Abstract: Six groups of bobwhites were dosed at 31.6, 56.2, 100, 178, 316 and 562 ppm. Mortalities occurring at these levels were 0, 1, 3, 5, 10 & 10, respectively. Five males & 5 females were tested in each group. At the two lower levels, toxic symptoms were transient lethargy, wing droop & toe picking. At the higher levels, other symptoms included nostral picking, depression, reduced reaction to external stimuli, lower limb weakness lethargy. A marked dose related reduction in food consumption was recorded at the two highest levels.

71-1

1/2 20

513 data 10,10,5,3,1,0

San 326 F 3/12/79

Bobwhite quail

LC50

79/03/12. 13.59.03.
BASIC PROGRAM A78LC50

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*****
DNC.          NUMBER      NUMBER      PERCENT      BINOMIAL
              EXPOSED     DEAD        DEAD          PROB.(PERCENT)
562           10          10          100           9.76563E-2
316           10          10          100           9.76563E-2
178           10          5           50            62.3047
100           10          3           30            17.1875
56.2          10          1           10            1.07422
31.6          10          0           0             9.76563E-2

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THE BINOMIAL TEST SHOWS THAT 56.2 AND 316 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS 98.8281 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 178.

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-----RESULTS CALCULATED USING THE MOVING AVERAGE METHOD
SPAN      G          LC50      95 PERCENT CONFIDENCE LIMITS
5         .115337    131.296  95.9965    178.808

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-----RESULTS CALCULATED USING THE PROBIT METHOD
ITERATIONS  G          H          GOODNESS OF FIT PROBABILITY
6           .183345    1         .622468

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SLOPE = 4.07848
95 PERCENT CONFIDENCE LIMITS = 2.33212 AND 5.82483

LC50 = 138.579
95 PERCENT CONFIDENCE LIMITS = 103.566 AND 185.485
