

10. Reviewer's Evaluation

A. Test Procedure :

The test procedure did not comply with the recommended EPA protocol of October 1982 (Part 158) for the following reasons:

- a. a formulated product was used and mixture of two active ingredients;
- b. # of fish/dosage is unknown; *AND*
- c. D.O in control and 36 ppm concentration dropped below 40%.

B. Statistical Analysis :

The biomomial test shows the 96-hour LC₅₀ to be 77 ppm.

C. Conclusions :

1. Category : Supplemental
2. Rationale : See test procedure above
3. Repairability : This study cannot be upgraded to core

LAIRD OMADINE-SODIUM 96-HOUR LC50 BLUEGILL SUNFISH 00105191

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB.(PERCENT)
280	10	10	100	.0976563
170	10	10	100	.0976563
100	10	10	100	.0976563
60	10	0	0	.0976563
36	10	0	0	.0976563

THE BINOMIAL TEST SHOWS THAT 60 AND 100 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS, BECAUSE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS GREATER THAN 95 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 77.4597

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.
