

FORMULATION:

% a.i. SC # CHEMICAL NAME
100% SN 49537 or Dropp
Technical

IA	IB	T	FW	EC	R		
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Validator:

Date:

Charles A. Bowen II

10/31/78

Test Type:

96-hour static bioassay on
warm and cold water fishes

Test ID.#

CITATION:

Rausina, Gary. 1976. Four-Day Static Aquatic Toxicity Studies
With SN 49537 In Rainbow Trout, Bluegills, And Channel
Catfish.

Validation Results?/ Classification:

Species	L C 50 (pp m)	Confidence limits (P=.05)	%Active Ingredient	Validation Status
Rainbow Trout	> 1,000.0	N.A.	100	Invalid
Bluegills (L. macrochirus)	> 1,000.0	N.A.	100	Invalid
Channel Catfish	> 1,000.0	N.A.	100	Invalid

All three bioassays were characterized by the following:

- (1). No mortalities were observed in control or test fishes.
- (2). No unusual behavioral reactions were noted among the fish exposed to SN 49537.
- (3). The test material was not soluble in water at the concentrations tested and was found on the surface of the water or adhered to the sides and bottom of each bioassay vessel.

See attached abstract for a complete description of testing procedures and physical/chemical parameters.

Validation Category/

Rationale:

The above bioassays are deemed Invalid as they were conducted with the following unacceptable test procedures:

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		Dropp								
96-hour static bioassay on warm and cold water fishes (page two)			Test Type:							
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CITATION:

- (1). All three species were tested at incorrect temperatures.
Rainbow trout -- 10° C instead of the recommended 12° C.
Bluegill Sunfish and
Channel Catfish -- 18° C instead of the recommended 22.0° C.
- (2). Bioassay vessels were lined with disposable polyethene bags.
- (3). The test material was found on the surface of the water or adhered to the sides and bottom of each bioassay vessel. The registrant's testing facility stated that the test material was not soluble in water at the concentrations tested. Furthermore, they indicate that the test material was also insoluble in acetone, ethanol, methanol and isopropanol and because of this, a weighed amount of SN 49537 was stirred into the water in each bioassay vessel.

Category Repairability:

All three bioassays are non-repairable as they were conducted with the unacceptable protocols cited above.

Abstract

Fingerling (35 to 75 mm) Rainbow Trout, Bluegill Sunfish, and Channel Catfish were tested at the following four concentrations of SN 49537 (Technical): 1.0, 10.0, 100.0, and 1,000.0 ppm. Bioassay vessels were lined with disposable polyethylene bags and filled with 12.5 liters of reconstituted water**. Ten fish of each species were tested at each test concentration and experimental control.

The testing facility reported that in all three cases that:

- (1). No mortalities were observed in any of the control or test fishes.
- (2). No unusual behavioral reactions were noted.

However, these results are suspect as SN 49537 was reported to be insoluble in water and as such there is considerable doubt as to whether the test fishes were actually exposed to the test material during the course of these three bioassays.

**The following compounds were added in the amounts stated per liter of deionized water:

30 mg calcium sulfate
30 mg magnesium sulfate
48 mg sodium bicarbonate
2 mg potassium chloride