

US EPA ARCHIVE DOCUMENT

109801

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8/14/78

DATA REVIEW NO.: ES-H-2

TEST: Aquatic invertebrate acute toxicity

SPECIES: Daphnia magna

RESULTS: 48 hour LC_{50} = 0.43 ppm (0.31 - 0.61 ppm)

CHEMICAL: R.P. 26019 Technical (Lot No. 76344, 94.5% a.i.)

TITLE: 48 hour static LC_{50} of R.P. 26019 Technical
in Daphnia magna.

ACCESSION NO.: 232703

STUDY DATE: October 11, 1977

RESEARCHER: Steven Roberts, Cannon Laboratories, Inc.

REGISTRANT: Rhodia, Inc.

VALIDATION CATEGORY: Core

ABSTRACT: Daphnids 12 to 24 hours old were separated from Cannon Laboratories cultures and used 20 per concentration level for testing purposes. Toxicant was introduced into testing vessels as solutions dissolved in acetone. Four 250 ml beakers with 200 ml of solution were used for each concentration. Water temperature was maintained at $17^{\circ} + 1^{\circ}C$. Feeding and aeration was discontinued during the test. A maximum of 10% mortality was observed in the vehicle (acetone) and untreated control. Statistics were calculated according to the methods of Lichfield, J.T., and Wilcoxon, F.

FORMULATION:			IA	IB	T	FW	EC	R		
% a.i.	SC #	CHEMICAL NAME	Validator:					Date:		
94.5%		Iprodione	Larry Turner					8/14/78		
			Test Type:							
			Aquatic invertebrate acute toxicity <u>Daphnia magna</u>							
			Test ID.# ES-H2							

CITATION: Roberts, Steven. 1977. Report: 48-hour static LC₅₀ of RP 26019 technical in Daphnia magna. 9 p. Study conducted by Cannon Laboratories. Submitted by Rhodia, Inc.; 359-EUP-58, Acc # 232703, 1/13/78.

RESULTS: Daphnia magna 48-hour LC₅₀ = 0.43 ppm (95% c.i. 0.31 - 0.60 ppm). Mortality was 20% at the lowest concentration of 0.1 ppm and 90% at the highest concentration of 1.0 ppm. Vehicle control mortality was 10%; untreated control mortality was 5%.

VALIDATION CATEGORY: Core

CATEGORY RATIONALE: Meets requirements for this test type.

ABSTRACT: Young Daphnia magna, 12 + 12 hours old, were exposed to iprodione in concentrations of 0 (control and acetone control), 0.1, 0.3, 0.5, 0.7 and 1.0 ppm for 48 hours. An initial range-finding test was conducted with 5 daphnids per concentration. For the definitive test, 4 replicates of 5 daphnids each were tested at each level. Tests were conducted in beakers containing 200 ml of water. The source of the water was not given, but most water chemistry data was reported, excepting D.O. Test temperature was 17 + 1°C. Vessels were not aerated during the test, nor were daphnids fed.

The LC₅₀ was determined by the method of Litchfield and Wilcoxon. When checked with Finney probit, an LC₅₀ value of .382 ppm was obtained, which is within the confidence limits reported.

See Union Carbide Corp.

Daphnia magna #8 hour LC₅₀ DER
by Turner 8/14/78
for TI - probit