

US EPA ARCHIVE DOCUMENT

109701

VALIDATION SHEET

FORMULATION: % a.i. 25% a.i. Formulation	SC#	CHEMICAL NAME Permethrin PP557	IA	IB	T	FW	EC	R				
			Validator:						Date:			
			R. Balcomb						Oct. 19, 1977			
			Test Type: 48 hr. LC ₅₀ to First Instar Daphnia (FP)									
Test ID # ES-K												

CITATION: Everd, P. and Doma, S. "PP557 Acute Toxicity of Emulsifiable concentrate JFU5054 to First Instar Daphnia Magna" ICI Plant Protection Division Report No. TMJ 1504 B (June, 1977).

VALIDATION CATEGORY: Core

RESULTS: The EC₅₀ values reported were: 24 hr. EC₅₀ = 1.93 mg/L (1.76-2.12) and 48 hr. EC₅₀ = 1.31 mg/L (1.17-1.48). These results were calculated using linear regression on log concentration plotted against a logit transformation of the Daphnia response.

The 24 hr. EC₅₀ value was validated by this reviewer using probit analysis: 1.91 mg/L (1.76-2.12). A 48 hr. EC₅₀ value was estimated by the reviewer via probit analysis as 1.13 mg/L but excess 0 and 100% effect values prevented accurate or complete analysis. Therefore, the 48 hr. data were also checked by regression analysis and an EC₅₀ value of 1.000 mg/L was obtained (Chi-square = 0.0015).

VALIDATION CATEGORY/RATIONALE: This study was determined core as guidelines were adhered to and statistical methods were appropriate and accurate.

CATEGORY REPAIRABILITY/RATIONALE: NA