

US EPA ARCHIVE DOCUMENT

FORMULATION:			IA	IB	T	FW	EC	R	
% a.i.	SC#	CHEMICAL NAME	Validator:		Date:				
FP		Permethrin	R. Balcomb		Nov. 15, 1977				
(24% Emulsifiable Concentrate PP557)			Test Type:						
			Acute Toxicity of PP557 (FP) to Rainbow Trout						
			Test ID #		ES-J				

CITATION: Hill, R.W. et al. "Determination of the Acute Toxicity of Formulation JFU5054 to Rainbow Trout (*Salmo gairdnerii*).\" ICI No. BL/B/1798 (May, 1977)

VALIDATION CATEGORY: *Supplemental*

RESULTS: The acute toxicity to Rainbow Trout was determined at 13°C. Nominal concentrations ranging from .028 to 0.28 mg/L were used. The 96-hour LC<sub>50</sub> (Geometric Mean Survival Period-Technique) was 0.052 mg/L. The registrant later (10-25-77) submitted a recalculation using a Log/probit technique. This method gave a 96-hour LC<sub>50</sub> of 0.056 mg/l with 95% confidence limits of 0.049-0.064 mg/l. The 0.042 mg/L nominal concentration was found to be the no effect level.

VALIDATION CATEGORY RATIONALE: The study was determined ~~to be~~ <sup>supplemental</sup> for the following reasons: (1) The nominal concentrations were used in the calculation of LC<sub>50</sub> values and these concentrations were not accurate indications of the amount of toxicant present. Measured levels ranged from 4% to 49% of nominal concentration levels. (2) Only one concentration level gave partial mortality results. (3) A linear regression (log/probit) using nominal concentrations indicated that a significant fit could not be obtained ( $r^2 = .980$ ,  $t = 6.68$ ,  $df = 1$ ).

CATEGORY REPAIRABILITY/RATIONALE: The study is not repairable - see #1 above.