US EPA ARCHIVE DOCUMENT

108801

VALIDATION SHEET CRF#_____ PAGE___ OF_____

FORMULATION:			IA	IB	T	FW	EC	R		
% a.i.	SC#	CHEMICAL NAME	Validator:					Date:		
Technical		Metolachlor	R. Balcomb					7/20/78		
		CGA-24705	Test Type: Bluegill Sunfish: 96-hr LC_{50}							
			Test ID.# ES - F							

CITATION: Buccafusco, Robert J., 1978. Acute Toxicity of CGA-24705 to Bluegill Sunfish (Lepomis macrochirus). Report # BW-78-6-181), EG & G - Warcham, Mass.

VALIDATION CATEGORY: Core

RESULTS:

LC_{50} Values (mg/l)				
24 hr	48 hr	72 hr	96 hr	No effect
>19 <28	16 (13-18)[1]	13 (11-16)	10 (8.6-12)	6.0 (96 hrs)

([1]95% Confidence interval)

PROCEDURE: The study generally follows EPA guidelines. Young bluegill sunfish, mean wt. (0.90(± 0.2) grams and mean length 44 (± 3) millimeters, were held for 14 days prior to testing at the test temperature of 22°C. The testing was performed in 19.6-liter glass jars with 10 fish used per concentration level; the test concentrations (nominal) were: 1.9, 2.8 4.1, 6.0, 8.8, 13, 19 and 28 mg/l. Control and acetone-control groups were also tested. The statistical analysis followed a moving average approach (Harris, E. K. 1959. Biometrics, Vol. 4, #3, pp. 157-164.)

VALIDATION CATEGORY RATIONALE: The study adhers to EPA guidelines. The statistics were checked by recalculating via the Weil technique (Weil, Carrol S., 1952. Biometric, Vol. 8., No. 3 p. 249-263.). A comparable value was obtained: 96 hr LC_{50} = 10.3 (9.5 - 11.1)mg/l.

REPAIRABILITY: N/A

SPECIAL NOTE: The report described the test material only as CGA-24705. Dr. Jack A. Norton, Regulatory Specialist for Ciba-Geigy, was contacted by phone (919-292-7100) for a more complete description of the compound. CGA-24705 is, according to Dr. Norton, technical metolachlor.