

US EPA ARCHIVE DOCUMENT

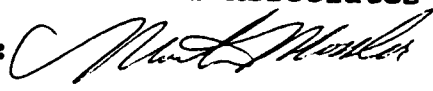
MRID No. 443648-01

DATA EVALUATION RECORD
§ 72-1 - ACUTE LC₅₀ TEST WITH A WARMWATER FISH

1. **CHEMICAL:** Chlorfenapyr PC Code No.: 129093
2. **TEST MATERIAL:** AC 303,630 Purity: 94.9%

3. **CITATION:**
Authors: G.S. Ward, F.J. Cunningham, and J.D. Wisk
Title: Acute Toxicity of AC 303,630 to the Channel Catfish (*Ictalurus punctatus*) Under Flow-Through Test Conditions
Study Completion Date: December 6, 1996
Laboratory: Toxikon Environmental Sciences, Jupiter, FL
Sponsor: American Cyanamid Company, Princeton, NJ
Laboratory Report ID: J9601007
MRID No.: 443648-01
DP Barcode: D239194

4. **REVIEWED BY:** Mark Mossler, M.S., Toxicologist, Golder Associates Inc.

Signature:  **Date:** 1/13/98

- APPROVED BY:** Pim Kosalwat, Ph.D., Senior Scientist, Golder Associates Inc.

Signature: P. Kosalwat **Date:** 1/13/98

5. **APPROVED BY:**

Signature: **Date:**

6. **STUDY PARAMETERS:**

Age or Size of Test Organism: 32 mm
Definitive Test Duration: 96 hours
Study Method: Flow-through
Type of Concentrations: Mean measured

7. **CONCLUSIONS:** This study is scientifically sound and fulfills the guideline requirements. The 96-hour LC₅₀ was determined to be 12.3 ppb, which classifies this compound as very highly toxic to the channel catfish.

Results Synopsis:

LC₅₀: 12.3 ppb
NOEC: 7.2 ppb

95% C.I.: 7.2-24.9 ppb
Probit Slope: N/A

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Mossler Chlorfenapyr Ictalurus punctatus 12-8-97

CONC.	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB. (PERCENT)
56.2	20	20	100	9.536742E-05
39.5	20	20	100	9.536742E-05
24.9	20	20	100	9.536742E-05
11.7	20	9	45	41.19014
7.2	20	0	0	9.536742E-05

THE BINOMIAL TEST SHOWS THAT 7.2 AND 24.9 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS, BECAUSE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS GREATER THAN 95 PERCENT.

AN APPROXIMATE LC50 FOR THIS SET OF DATA IS 12.29824

WHEN THERE ARE LESS THAN TWO CONCENTRATIONS AT WHICH THE PERCENT DEAD IS BETWEEN 0 AND 100, NEITHER THE MOVING AVERAGE NOR THE PROBIT METHOD CAN GIVE ANY STATISTICALLY SOUND RESULTS.

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