

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

72-3a

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

27  
May 18, 1991

MEMORANDUM

SUBJECT: Review of Fish Acute Toxicity Studies  
Reg# 000707-00203

FROM: James W. Akerman, Chief  
Ecological Effects Branch  
Environmental Fate and Effects Division H7507C

TO: Dennis Edwards PM 12  
Insecticide/Rodenticide Branch  
Registration Division H7505C

The registrant of dicofol, Rohm and Haas, has submitted two acute fish studies in response to the DCI, as modified by EEB's 8-14-90 comments. The following studies were submitted and reviewed.

Studies Reviewed

1. Freshwater Fish Acute Flow-Through Toxicity Test.  
Species Tested: Salmo gairdneri

CITATION: Bowman, J.H. and P. Ritchie. 1990. Acute Flow-Through Toxicity of Dicofol (Kelthane® Technical Miticide) to Rainbow Trout (Salmo gairdneri). ABC Laboratory Project ID No. 37745. Prepared by Analytical Bio-Chemistry Laboratories, Inc., Columbia, MO. Submitted by Rohm and Haas Company, Spring House, PA. EPA MRID No. 416954-01.

CONCLUSIONS: This study is not scientifically sound. The concentrations measured at 0 and 96 hours were greatly different indicating that the actual concentrations the fish were exposed to were unknown.

41695402 - accept 423a

41695401 - unaccept 72-1

2. Freshwater Fish Acute Flow-Through Toxicity Test.  
Species Tested: Cyprinodon variegatus

CITATION: Bowman, J.H. 1990. Acute Flow-Through Toxicity of Dicofol (Kelthane® Technical Miticide) to Sheepshead Minnow (Cyprinodon variegatus). ABC Laboratory Project ID No. 37746. Prepared by Analytical Bio-Chemistry Laboratories, Inc., Columbia, MO. Submitted by Rohm and Haas Company, Spring House, PA. EPA MRID No. 416954-02.

CONCLUSIONS: This study is scientifically sound and meets the guideline requirements for a flow-through, acute toxicity test. Based on mean measured concentrations, the 96-hour LC<sub>50</sub> of Dicofol for sheepshead minnows was 0.37 mg a.i./L. Therefore, Dicofol is classified as highly toxic to sheepshead minnows. The NOEC was estimated as 0.025 mg a.i./L.

Status of Data Requirements

At the time of that memorandum, the following data were still outstanding.

<u>STUDY DESCRIPTION</u>	<u>STATUS</u>
71-4 Avian Reproduction Study with Predatory species	Test was submitted, but additional info. was required. Data req. not fulfilled
72-1B Cold-water Fish Acute	Test submitted, reviewed and found to be invalid Data Req. not fulfilled
72-3A Estuarine/Marine Fish Acute	Test submitted and accepted. Data Req. fulfilled
72-3 Estuarine/Marine Shrimp Acute	Data Requirement not fulfilled
72-4 Fish Early Life Stage Test with Coldwater Species	Data Requirement not fulfilled
70-1 Residue Monitoring Study	Two years completed and results submitted for review. Third season in progress.

Summary

To fulfill the requirements of the 1990 data call in, several data are still outstanding, as identified above. The fish acute tests submitted with this action have been reviewed. The coldwater fish test is invalid, the estuarine fish study is acceptable. If you have questions, please contact Dan Rieder.