



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

2-15-95  
OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

SUBJECT: Review of Three Acute Estuarine Toxicity Tests for  
Halobrom (DP Barcode D171469)

FROM: *fw* Anthony Maciorowski, Branch Chief  
Ecological Effects Branch  
Environmental Fate and Effects Division (7507C) *Douglas J. Chan* 2/15/95

TO: Mark Wilhite, PM 51  
Accelerated Reregistration Branch  
Special Review and Reregistration Division (7508 W)

The Ecological Effects Branch has reviewed the subject studies submitted to fulfill the requirements for guideline #'s 72-3(a), (b) and (c) (acute estuarine and marine organisms for the active for the active ingredient Halobrom (Chemical No 006315). The specific studies reviewed are:

1. Estuarine Fish 96-hour Acute Flow-through Toxicity Test (72-3(a))

Test Substance: Halobrom (90% a.i.)  
MRID #: 420761-02

This study is not scientifically sound and has been classified as invalid (i.e. can not be used to fulfill the basic requirements of current guidelines and are not acceptable for use in a risk assessment). The measured concentrations varied greatly from test initiation to termination and between replicates, and as a consequence the concentrations exposed to test organisms is unknown and an accurate LC<sub>50</sub> cannot be determined. (An estimated LD<sub>50</sub> value based on the mean measured value was 1.5 mg/l, and the NOEC was 0.32 mg/l. These values would classify Halobrom as moderately toxic to sheephead minnow.)

2. Mollusc 96-hour Flow-through Shell Deposition (72-3(b))

Test Substance: Halobrom (90% a.i.)  
MRID #: 420761-01

006315



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This study is scientifically sound, however, raw data was not submitted to verify the NOEC, MATC, and LOEC and as a result this study has been classified as supplemental (i.e. cannot be used to fulfill the basic requirements of current guidelines, but may be acceptable for use in a risk assessment). The estimation of an LC<sub>50</sub> value based on the measured concentrations was 1.1 mg/l and the NOEC was 0.73 mg/l. These values would classify Halobrom as moderately toxic to eastern oysters.

3. Shrimp 96-hour Acute Flow-through Toxicity Test (72-3(c))

Test Substance: Halobrom (90% a.i.)  
MRID #: 420761-03

This study is not scientifically sound and has been classified as invalid (i.e. can not be used to fulfill the basic requirements of current guidelines and are not acceptable for use in a risk assessment). The measured concentrations varied greatly from test initiation to termination and between replicates, and as a consequence the concentrations exposed to test organisms is unknown and an accurate LC<sub>50</sub> cannot be determined. (An estimated LD<sub>50</sub> value based on the mean measured value was 1.8 mg/l, and the NOEC was 0.36 mg/l. These values would classify Halobrom as moderately toxic to mysid shrimp.)

Data Evaluation Records are attached, ~~as well as a Phase IV Data Requirement Sheet.~~

If there are any questions concerning this review please contact Bill Evans of my staff on 305-6754.



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MAR 10 1995

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

CERTIFIED MAIL - P 040 186 642

Mr. Ruben Wichy  
AmeriBrom, Inc.  
52 Vanderbilt Avenue  
New York, NY 10017

SUBJECT: Review of estuarine/marine ecotox studies for the  
chemical 1-Bromo-3-chloro-5,5-dimethylhydantoin.

Dear Mr. Wichy:

The Agency has reviewed the estuarine/marine minnow, oyster, and shrimp studies for bromo-chloro-dimethylhydantoin (Chemical No. 6315, Case 3055) and has reached the following decisions:

Gdln 72-3(a) Estuarine/Marine Toxicity - Minnow MRID 42076102

This study is unacceptable and has to be repeated. The measured concentrations varied greatly from test initiation to test termination and between replicates. Therefore, the actual concentrations to which the test organisms were exposed are unknown and an accurate LC<sub>50</sub> cannot be determined. A copy of the DER is enclosed.

Gdln 72-3(b) Estuarine/Marine Toxicity - Oyster MRID 42076101

This study is unacceptable but may be upgraded. You are required to submit the raw data to verify the NOEC, MATC, and LOEC for this oyster shell deposition study. A copy of the DER is enclosed.

Gdln 72-3(c) Estuarine/Marine Toxicity - Shrimp MRID 42076103

This study is unacceptable and has to be repeated. The measured concentrations varied greatly from test initiation to test termination and between replicates. Therefore, the actual concentrations to which the test organisms were exposed are unknown and an accurate LC<sub>50</sub> cannot be determined. A copy of the DER is enclosed.

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You are required to submit the additional information for the upgradable oyster study within three months of receipt of this letter, or if you cannot submit the required information a new study is required which must be submitted by March 31, 1996. New studies for the unacceptable minnow and shrimp studies are required to be submitted by March 31, 1996.

If you do not submit the data within the specified time frame, I will pursue appropriate regulatory action to ensure compliance with our statutory goals. If you have any questions regarding this letter, please contact Tom Myers in the Accelerated Reregistration Branch at (703) 308-8074.

Sincerely yours,



Jay S. Ellenberger, Chief  
Accelerated Reregistration Branch  
Special Review and  
Reregistration Division

Enclosures

cc: Joanne Miller, PM-23  
Al Vaughan, EEB