

US EPA ARCHIVE DOCUMENT



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 EFGWB Out :

FEB 12 1992

To: Barbara Briscoe
 Product Manager PM 51
 Special Review and Reregistration Division (H7508W)

From: Emil Regelman, Supervisory Chemist
 Environmental Chemistry Review Section #2
 Environmental Fate & Ground Water Branch/EFED (H7507C)

Thru: Henry Jacoby, Chief
 Environmental Fate & Ground Water Branch/EFED (H7507C)

Attached, please find the EFGWB review of...

Reg./File # : 099901-000707

Chemical Name : Octhilinone

Type Product : Mildewcide

Product Name : Kathon Skane

Company Name : Rohm and Haas Company

Purpose : Request of Time Extension of Two Environmental Fate Studies

Action Code : 610 EFGWB #(s): 92-0084 Total Review Time: 2 days

| EFGWB Guideline/MRID Summary Table: The review in this package contains... | | | | | |
|--|---|-------|-------|-------|-------|
| 161-1 | X | 162-1 | 164-1 | 165-1 | 166-1 |
| 161-2 | X | 162-2 | 164-2 | 165-2 | 166-2 |
| 161-3 | | 162-3 | 164-3 | 165-3 | 166-3 |
| 161-4 | | 162-4 | 164-4 | 165-4 | 167-1 |
| 201-1 | | 163-1 | 164-5 | 165-5 | 167-2 |
| 202-1 | | 163-3 | | | |

1. CHEMICAL:

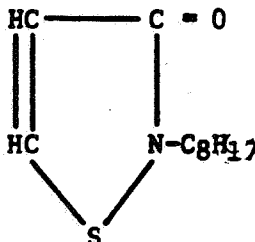
Common name: Octhilinone

Chemical name: 2-n-Octyl-4-isothiazolin-3-one

CAS No.: 26530-20-1

Trade Name(s): Kathon; Skane

Chemical Structure:



Formulations: Not available

Physical/Chemical Properties of Active Ingredient:

Molecular Formula: C₁₁H₁₉NOS
Molecular Weight: 213
Physical State: Not available
Vapor Pressure: 0.0001 mm Hg
Melting Point: Not available
Solubility: 300 ppm (at unspecified temperature)

Note: Information on vapor pressure and solubility were obtained from the following report:

"Environmental Dissipation Modeling of the Cooling Tower Antifoulant RH-893"

Although this study was completed by the contractor (Labat-Anderson, Inc.) on 8/18/86, Rohm and Haas did not submit the report to EPA until May 1990 (MRID 41482511). According to the memorandum (dated 12/4/90) from Dana Spatz and Silvia Termes of EFGWB/EFED to Amy Rispin of SACS/EFED regarding the review of Phase IV package for octhilinone, this model study could not be evaluated because the data used in the model were generated during the 1970's and may not have been validated by the Agency or may have been obtained from studies that are not consistent with current Pesticides Assessment Guidelines.

2. TEST MATERIAL:

Octhilinone

3. STUDY/ACTION TYPE:

Request for time extension for the List B Chemical Octhilineone [Studies 161-1 (hydrolysis) and 161-2 (photodegradation in water)].

4. STUDY IDENTIFICATION:

A letter dated September 10, 1991 from Wendy W. Bingaman of Rohm and Haas Company to Frank Rubis of SRRD/OPP/EPA.

5. REVIEWED BY:

Larry Liu, Ph.D.
Chemist
Chemistry Section #2
EFGWB/EFED/OPP

Signature: Jarry Liu

Date: FEB 12 1992

6. APPROVED BY:

Emil Regelman
Section Chief
Chemistry Section #2
EFGWB/EFED/OPP

Signature: ER

Date: FEB 12 1992

7. CONCLUSIONS:

EFGWB cannot concur with the time extension for studies 161-1 (hydrolysis) and 161-2 (photodegradation in water) requested by the registrant.

These two studies were due 8/24/90. To EFGWB's knowledge, the registrant has not made any efforts to request time extension until one year after the due date. Furthermore, no explanations were provided for the delay of the conduction of these two studies and the need of additional time to complete them.

The waiver request for the other required environmental fate studies was addressed in the registrant's letter of 9/18/91 and will be reviewed separately.

8. RECOMMENDATIONS:

The registrant should be informed that the EFGWB cannot concur with the time extension for the following studies:

- 161-1 Hydrolysis
- 161-2 Photodegradation in Water

9. BACKGROUND:

According to the LUIS general reports for octhilinone (dated 1/21/91), its use groups are:

- Terrestrial Food+Feed Crop
- Terrestrial Non-Food Crop
- Aquatic Non-Food Industrial
- Outdoor Residential
- Indoor Non-Food

As of 2/4/92, there are six registrants for the registered use of octhilinone. Up to date, only one registrant (Rohm and Haas Company) has expressed their intention to support the uses of octhilinone. Therefore, it should be noted that the following data requirements and discussions are based only on the registered uses for one registrant.

Based on the letter of 9/18/91 from Wendy W. Bingaman of Rohm and Haas Company to Frank Rubis of SRRD/OPP regarding the Reregistration Phase IV Data Call-In Notice, the registrant is only supporting two use groups: Aquatic Non-Food Industrial (Code F) and Indoor Non-Food (Code M). The use of octhilinone as cotton seed protectant (Reg. No. 707-127) under Terrestrial Food+Feed use group was canceled in April 1990.

According to the letter of 9/18/91 mentioned above, the registrant is supporting the following registered uses:

| Reg. No. | Name/Type | Currently Registered Use* |
|----------|---------------------------------------|--|
| 707-100 | Skane M-8 Industrial mildewcide | Coatings, wallpaper pastes caulks, formulation of industrial mildewcides (M) |
| 707-104 | Kathon LP Mildewcide | Hide and leather processing (M) |
| 707-120 | Kathon 4200 Mildewcide | Formulation of fabric mildewcide (M) |
| 707-121 | Kathon LM Mildewcide | Fabric mildewcide (M) Industrial microbicide for use in recirculating water cooling towers and air washer systems (F) |

| | | |
|---------|---|---|
| 707-143 | Kathon 893T Industrial mildewcide | Formulation of industrial mildewcides (M) |
| 707-195 | Kathon 893 MW Microbicide | Metalworking fluids and hydraulic fluids (M) |
| 707-208 | Kathon 893 TP 25% Industrial fungicide | Coatings, caulks and sealants, wallpaper adhesives, aqueous emulsions and adhesives, polymer compounds and fabrics (M) |

 * Supported use patterns - M (Indoor non-food)
 F (Aquatic non-food industrial)

Currently, there are no environmental fate data requirements for the Indoor Non-Food use (40 CFR 158; 7/1/91 edition). The following data requirements for the Aquatic Non-Food Industrial use have not been satisfied:

- 161-1 Hydrolysis
- 161-2 Photodegradation in Water
- 162-3 Anaerobic Aquatic Metabolism
- 162-4 Aerobic aquatic Metabolism
- 163-1 Leaching-Adsorption/Desorption
- 164-2 Aquatic Field Dissipation
- 165-3 Accumulation in Irrigated Crops (insufficient fate data and use information to determine if discharge can contaminate water used for irrigation)
- 165-4 Accumulation in Fish
- 165-5 Accumulation in Aquatic Non-Target Organisms (reserved pending results of 165-4)

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

The purpose of this review is to comment on the request of time extension for studies 161-1 (hydrolysis) and 161-2 (photodegradation in water) until 2/25/92.

These two studies were due 8/24/90. In the attachment of the letter of 9/10/91, the registrant indicated that these studies were initiated in January 1990. To EFGWB's knowledge, the registrant has not made any efforts to request time extension until one year after the due date. Furthermore, no explanations were provided for the delay of the conduction of these two studies and the need of additional time to complete them.

Without adequate explanations, the EFGWB cannot concur with the request of time extension.

The waiver request for the other required environmental fate studies (anaerobic and aerobic aquatic metabolism, leaching-adsorption/desorption, aquatic field dissipation, and accumulation in fish) mentioned in the letter of 9/10/91 was discussed in details in the letter of 9/18/91 from the registrant. This will be reviewed separately by EFGWB.

11. COMPLETION OF ONE-LINER:

A One-Liner Database file was opened in October 1989. However, no additional data have been submitted to EPA.

12. CBI APPENDIX:

Not applicable.