Shaughnessy #: 128857

Date out of EAB: SEP 11 1985

Signature: [signature]

To: H. Jacoby
Product Manager # 21
Registration Division (TS-767)

From: Emil Regelman, Acting Chief
Registration Standards, Section #3
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

aqueous photolysis
in pond water
soil dissipation

Attached please find the EAB review of:

Reg./File No.: 707-EUP-RNL

Chemical: Systhane

Type Product: Fungicide

Product Name: RH-3866

Company Name: Rohm and Haas

Submission Purpose: EUP for use on grapes, apples and turf grain

Action Code: 242

Date In: 6/10/85

EAB # 5663

Date Completed: SEP 11 1985

TAIS (level II)	Days
52	3

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

1. CHEMICAL: RH-3866 (Systhane)
butyl-[4-chlorophenyl-1-H-1,2,4-triazole-1-propanenitrile

2. TEST MATERIAL: 40% W.P.

3. STUDY/ACTION TYPE: EUP (fungicide) on apples, grapes and turf grass.

4. STUDY IDENTIFICATION: Accession #256773

Study 1

Ackermann, Dec. 1984. Aqueous photolysis of RH-3866. Technical Report No. 310-84-33. Rohm and Haas Co. Philadelphia, PA Acc. No. 256773. Reference 3.

Study 2

Deakyne, R.O. and C.K. Brackett. Nov. 1984. Analytical report on the decline of RH-3866 residues in soil. Rohm and Haas Co., Philadelphia, PA Acc. No. 256773. Reference 7.

5. REVIEWED BY:

John Jordan
Microbiologist
EAB/HED/OPP

Signature: John Jordan
Date: 9/30/85

6. APPROVED BY:

Emil Regelman
Acting Chief
Review Section #3,
EAB/HED/OPP

Signature: Emil Regelman
Date: OCT 1 1985

7. CONCLUSIONS:

Aqueous photolysis

The study does not fulfill the data requirements. The primary EAB objection to the study is the lack of an appropriate buffered distilled or deionized water test solution. Pond water was, (a) not buffered, (b) contaminants may have interfered with chemical analyses, (c) pond water may have contained

sensitization contaminants or, (d) contaminants may have influenced the adsorption of the light source. A study using a standardized test solution is required.

Please refer to the Dynamac conclusion (Study 1, p.5) for further deficiencies.

Field Dissipation

This study does not satisfy the data requirement, but it provides information on the dissipation of the parent compound. However, degradates were not identified or quantified. The analytical method was not provided, and, therefore, conclusions pertinent to the study are tentative. Other deficiencies are detailed in the conclusion on p. 8 (study number 2) of the Dynamac report.

8. RECOMMENDATIONS:

Aqueous Photolysis

Photolysis rate determination and photoproduct identification experiments must be carried out using distilled or deionized water instead of pond water. Deficiencies are detailed in the conclusion on p. 5 of the Dynamac report.

Field Dissipation

Dissipation of parent compound was addressed but degradates were not identified or quantified. Degradates must be identified and quantified. The analytical method was not submitted, therefore, conclusions regarding the study are tentative pending receipt of the method. Deficiencies are reported in the conclusion on page 8 of the Dynamac review.

9. BACKGROUND:

Please refer to the Dynamac Introduction on p. 1.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: Please refer to pages 2 through 8 of Dynamac's Tasks I and II September 18, 1985 final report.

11. COMPLETION OF ONE-LINER: One liner has not been completed to date.

12. CBI APPENDIX: Data are claimed to be CBI by the registrant and are to be treated as such.

Response to Additional Data and Comments

In response to a 3/19/85 Dynamac review of RH 3866, the registrant requested clarification of ten points on 5/15/85. Below is a summary of the resoluiton (status) of the ten points.

Resolved/Unresolved Issues

1) Mobility of metabolites - Aged leaching data gap

2) Resolved -- percent recovery values

3) Adsorption/desorption data gap

4) Temperatures for laboratory hydrolysis, aerobic soil metabolism, and anaerobic soil metabolism studies are required.

5) Resolved -- leaching of samples discrepancy

6) Mobility of parent data gap

7) Resolved -- effects of air drying on test results

8) Resolved -- recovery values

9) Confined accumulation data gap

10) Resolved -- fish bioaccumulation data not required.