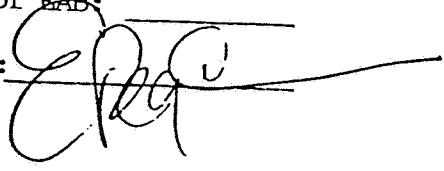


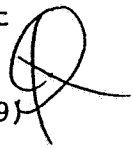
Shaughnessy No.: 109301

AUG 7 1986

Date Out of EAB:

Signature: 

To: George LaRocca  
Product Manager #15  
Registration Division (TS-767)

From: Emil Regelman, Supervisory Chemist  
Review Section #3  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769) 

Attached, please find the EAB review of...

Reg./File # : 201-URI

Chemical Name: Fenvalerate

Type Product : Insecticide

Product Name : Pydrin

Company Name : Shell Oil Company

Purpose : To fill data gap - Photodegradation in Water - The study  
was previously reviewed.

Action Code(s): 166

EAB #(s) : 6682

Date Received: 6/30/86

TAIS Code: 42

Date Completed: 8/6/86

Total Reviewing Time: 0.5 days

Deferrals to:

\_\_\_\_\_ Ecological Effects Branch  
\_\_\_\_\_ Residue Chemistry Branch  
\_\_\_\_\_ Toxicology Branch

1. CHEMICAL: Common name: Fenvalerate

Chemical name: 4"-Chloro-(2'''-isopropyl)phenylaceto-2-(3'-phenoxy)phenylacetone nitrile

Trade name(s): Pydrin, SD 43775 (Shell Chemical Co.); Belmark (Shell International Chemical Co.); Sumicidin, Sumitly, Sumipower (Sumitomo Chemical Co.).

Formulations: Pydrin (SD 43775) formulations 2.4 lb ai/gal EC and 4 lb ai/gal ULV concentrate (Shell Chemical Co.).

Physical/Chemical properties:

Empirical formula:  $C_{25}H_{22}ClNO_3$

Molecular weight: 419.9

Physical state: Clear viscous yellow or brown liquid at 23°C; mild chemical odor.

Density: 1.17 g/ml at 23°C

Vapor pressure:  $1.1 \times 10^{-8}$  mmHg at 25°C

Solubility: in water, <1 mg/l at 20°C  
in acetone, chloroform, cyclohexane, ethanol, and xylene, >1 kg/kg  
in hexane, 155 g/kg at 23°C

Stability: Stable to heat and sunlight  
Stable to moisture  
More stable in acid (pH 4) than alkaline solution.

2. TEST MATERIAL: Study Previously Reviewed

3. STUDY/ACTION TYPE: Submission to fill data gap - Photodegradation in Water. Study Previously Reviewed -

4. STUDY IDENTIFICATION: Mikami, N. et al., 1980. Photodegradation of Fenvalerate (Sumicidin) in Water and on Soil Surface. J. Pesticide Sci. 5: 225-236. Res. Dept., Pesticides Div. Sumitomo Chem. Co., Ltd. Takarazuka, Hyogo 665, Japan. Study Previously Reviewed.

5. REVIEWED BY: John H. Jordan, Ph.D.  
Microbiologist  
EAB/HED/OPP

Signature: John H. Jordan

Date: August 6, 1986

6. APPROVED BY:

Emil Regelman  
Supervisory Chemist  
Review Section #3, EAB/HED/OPP

Signature: Emil Regelman

Date: AUG 7 1986

7. CONCLUSIONS:

The study does not satisfy data requirement, because insufficient data were provided to determine the photodegradation rate of fenvalerate in water. Study Previously Reviewed.

8. RECOMMENDATIONS:

The study should be returned to the registrant with the above comment.