

Shaughnessy No.: 029001

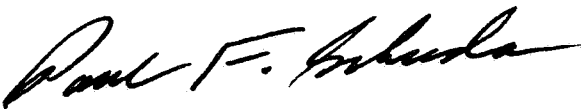
Date Out of EAB: JAN 28 1988

To: Lois Rossi
Product Manager #21
Registration Division (TS-767C)

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



Thru: Paul F. Schuda, Ph.D., Chief
Exposure Assessment Branch
Hazard Evaluation Division (TS-769C)



Attached, please find the EAB review of...

Reg./File # : 464-511

Chemical Name: 1,3-Dichloropropene

Type Product : Nematicide/Fungicide/Insecticide/Herbicide

Product Name : Telone II

Company Name : Dow Chemical Company

Purpose : Requesting waiver for the leaching and adsorption/desorption
study with 1,2-D.

Date Received: 11/6/87

Action Code(s): 660

Date Completed: 1/27/88

EAB #(s) : 80105

Monitoring study submitted:

Total Reviewing Time: 1 day

Monitoring study voluntarily:

Deferrals to: Ecological Effects Branch

 Residue Chemistry Branch

 Toxicology Branch

1. CHEMICAL: Common name:

1,3-Dichloropropene

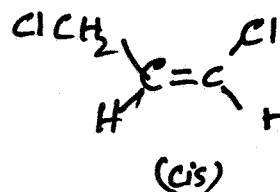
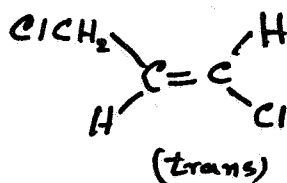
Chemical name:

1,3-Dichloropropene

Trade name(s):

Telone II Soil Fumigant

Structure:



Formulations:

94% Ready to use (RTU)

Physical/Chemical properties:

Molecular formula: $C_3H_4Cl_2$.

Molecular weight: 111.

Physical state: Colorless to straw-colored liquid.

Vapor pressure: 22 mm Hg at 20°C.

Solubility: Water - 0.1%.

2. TEST MATERIAL:

1,3-Dichloropropene

3. STUDY/ACTION TYPE:

Data waiver request. Dow Chemical Co. is requesting a waiver from conducting leaching and adsorption/desorption studies with 1,2 dichloropropane, a contaminant of 1,3-dichloropropene (\$163-1). (Refer to EAB's review #70599, 9/15/87.)

4. STUDY IDENTIFICATION: N/A.

5. REVIEWED BY:

Padma Datta, Ph.D.
Chemist
Review Section #3
EAB/HED/OPP

Signature: Padma Datta

Date: 1/28/88

6. APPROVED BY:

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

Signature: Emil Regelman

Date: JAN 28 1988

7. CONCLUSION:

EAB cannot concur with the justifications given by Dow Chemical Co. for not conducting leaching and adsorption/desorption studies (\$163-1) with 1,2-Dichloropropane (1,2-D). This is because (1) 1,2-D is a major impurity of Telone II and normally occurs at a level of 0.08% (800 ppm) and is water-soluble up to 0.1% (1000 ppm); (2) 1,2-D has been detected (1.2-21.2 ppb) in wells located at or near use sites in CA, NY, and FL; (3) 0.15-0.18 ppm of 1,2-D (depending on whether 0.08% or 0.1% impurity) will be added to a 6 inches depth of soil in one acre, if the maximum rate of 36 gallon of Telone II per acre is applied; (4) the soil field dissipation study was only partially acceptable and 1,2-D monitoring was questionable; (5) EAB's Ground Water team (C. Eiden) supports that leaching and adsorption /desorption studies (\$163-1) with 1,2-D must be conducted.

8. RECOMMENDATION:

EAB requests RD inform Dow Chemical Co. that the column leaching studies (\$163-1) with 1,2-D, the major impurity in the Telone II formulation, must be conducted.

9. BACKGROUND:

On July 5, 1984, the Agency sent out a special "data call-in" notice for ground water, toxicology, residue and related data for 1,3-dichloropropane. The authority for this notice is under Section 3(c)(2)(B) of FIFRA, 7 U.S.C. Section 136 a (c)(2)(b), amended 1972. Some of the environmental fate data requirements under 40 CFR \$158.130 and the Pesticide Assessment Guidelines (Subdivision N) were included. In this notice, a leaching and adsorption/desorption studies for terrestrial use only (\$163-1) with a 28 month schedule due date (October 14, 1987) were required for 1,3-D. Dow Chemical Co. encountered difficulty in conducting the soil column studies due to unacceptable losses, of 1,3-D, which is highly volatile. On October 2, 1987 Dow Chemical Company requested an extension until February 29, 1988, for the submission of leaching and adsorption/desorption studies for both parent (1,3-D) and aged parent. On October 8, 1987, Dow Chemical requested a waiver from conducting leaching and adsorption/desorption studies using 1,2-D, a major impurity in the Telone II formulation, on grounds such studies with an impurity are not required by Subdivision N of the Pesticide Assessment Guidelines. However, Section 3(c)(2)(B) of FIFRA can require a registrant to submit all data considered necessary for any chemical in a pesticide formulation.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: N/A.

11. COMPLETION OF ONE-LINER: N/A.

12. CBI APPENDIX: N/A.