Shaughnessy No.: 114501

Date Out of EAB: JUN 26 1986

To: L. Schnaubelt
Product Manager 12
Registration Division (TS-767)

From: Samuel Creeger, Chief
Review Section #1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

Attached, please find the EAB review of...

Reg./File # : 264 - 379

Chemical Name: Thiodicarb

Type Product : Insecticide

Product Name : LARVIN

Company Name : Union Carbide

Purpose : Review soil TLC study - new use requested

Action Code(s): 316

EAB #(s) : 6620

Date Received: 2/19/86

TAIS Code:

Date Completed: JUN 26 1986

Total Reviewing Time: 1 day

Deferrals to:

____ Ecological Effects Branch

____ Residue Chemistry Branch

____ Toxicology Branch

Monitoring study requested by EAB: ____

Monitoring study voluntarily conducted by registrant: ____

1. CHEMICAL: Thiodicarb, LARVIN

2. TEST MATERIAL: N/A

3. STUDY/ACTION TYPE: Soil thin-layer chromatography study

4. STUDY IDENTIFICATION: UC 51762 Pesticide, Mobility on Soil Thin-Layer Chromatograms

5. REVIEWED BY:

Stephen J. Simko
Chemist
EAB/HED/OPP

Signature: S. Simko 6/26/86

6. APPROVED BY:

Samuel M. Creeger
Chief, Section 1
EAB/HED/OPP

Signature: Samuel M Creeger JUN 26 1986

7. CONCLUSIONS:

The submitted study was previously reviewed by EAB in the review dated May 1, 1981. The major degradates of thiodicarb were rated as mobility class 5 (methomyl oxime) and class 4 (methomyl). Thiodicarb was rated as mobility class 2.

8. RECOMMENDATIONS:

The submitted soil TLC study indicates that the soil degradates of thiodicarb will have a high potential to leach through soil. The principal degradate, methomyl, persists in sterile soils. The possibility exists that methomyl may leach to deep, almost sterile soil depths, persist there and gradually enter ground water. With this information, we conclude that degradation products of thiodicarb have potential to leach through soil and reach ground water. To remove this concern, a field dissipation study under worst case conditions (sandy soil, high rainfall) is needed that demonstrates the field leaching potential of thiodicarb residues to be low. The registrant is encouraged to submit a test protocol for EAB's comment before initiating the study. Also needed is a continuous spectra of the light wavelengths vs. intensity of the light source used in the photodegradation study in the EAB review of May 1, 1981. It is not clear whether simulated sunlight conditions were fully satisfied.

9. BACKGROUND: This soil TLC study was submitted in response to EAB review of 12/9/85. In that review the registrant requested adding use on turf, ornamentals and non-crop areas including non-bearing fruit plants and ditchbanks.

2

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

11. COMPLETION OF ONE-LINER:

12. CBI APPENDIX:

No CBI is included.