

US EPA ARCHIVE DOCUMENT

Shaughnessy No.: 079401

Date Out of EAB: 11/3/87

To: S. Lewis
Product Manager 50
Registration Division (TS-767C)

From: Frank Davido, Chief *Frank Davido*
Field Studies and Special Projects Section #5
Exposure Assessment Branch
Hazard Evaluation Division (TS-769C)

Attached, please find the EAB review of...

Reg./File # : 187,785

Chemical Name: Endosulfan

Type Product : Insecticide

Product Name : THIODAN® 50 WP

Company Name : American Hoechst Corporation

Purpose : Review of proposed protocol for study of dissipation of dislodgeable foliar residues of endosulfan on tree fruit and tomatoes

Date Received: 9/4/1986

Action Code: 400

Date Completed: 11/3/87

EAB #(s) : 60831

Monitoring study requested:

Total Reviewing Time: 16 hours

Monitoring study voluntarily:

Deferrals to: Ecological Effects Branch
 Residue Chemistry Branch
 Toxicology Branch

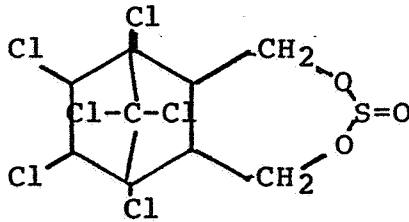
REVIEW OF REENTRY DATA

1. CHEMICAL:

Common name: ENDOSULFAN

Chemical name: 1,4,5,6,7,7-hexachloro-5-norbornene-2,3-dimethanol cyclic sulfite

Structure:



Other names: Thiodan, cyclodan, and many others CAS# 115-29-7, RTECS #RB9275000

2. TEST MATERIAL:

THIODAN® 50 WP will be applied to fruit trees and tomato plants.

3. STUDY/ACTION TYPE:

Waiver Request

4. STUDY IDENTIFICATION:

Protocol entitled, "Protocol for Assessing Dislodgeable Foliar Residues of Endosulfan Insecticide on Tree Fruits and Tomatoes in California", and submitted to American Hoechst Corp. on August 8, 1986. Reg. File No., 079401; No Accession Number; Record No., 179,469; No MRID Number available.

5. REVIEWED BY:

James D. Adams, PhD
Chemist

Field Studies and Special Projects Section #5

James D. Adams

11/3/1987

6. APPROVED BY:

Frank Davido, Chief

Field Studies and Special Projects Section #5
Exposure Assessment Branch, HED (TS-769)

Frank Davido

11/3/1987

7. CONCLUSIONS:

The protocol is acceptable. The procedures cited in Subdivision K are being followed with a few revisions as necessary for the type of leaves being handled. This is allowed under subdivision K. The application of Endosulfan will be at maximum usage rates and generally under worst-case environmental condi-

tions. Other testing is allowed at the Registrant's option but is not planned under this protocol.

8. RECOMMENDATIONS:

The Registrant should be informed that the protocol is acceptable.

9. BACKGROUND:

A Data Call In (DCI) Notice was issued for Endosulfan on May 27, 1986. In response to that DCI the Registrant has submitted, a protocol prepared for them by the Contractor, Orius Associates Inc., 2329 Oak Drive, Ijamsville, MD 21754. Submission of a protocol is not required under Subdivision K but is encouraged by EAB.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

The Contractor is planning to follow the methodology outlined in Subdivision K. That is, the dislodgeable residue method of Iwata et al. (1977) will be largely followed, and the correlation of Pependorf and Leffingwell (1982) will be used to estimate fieldworker exposure rates. [These references are cited in the protocol.]

The major deviation from the dislodgeable residue procedure is to be the cutting of tomato leaves rather than using the punch method suggested by Iwata et al. This is acceptable if there is data supplied to allow the conversion of the residue weight data into residue weight per unit area. This is crucial for use of the Pependorf correlation, and omission of that data could invalidate the rest of the data.

In all other ways the protocol is acceptable. Application is to be at the maximum rate allowed on the label and will be in the Central Valley of California. Two sites will be treated and sampled for each crop. The sampling times are acceptable but may be changed as field conditions demand.

The Registrant is electing to minimize the tests that will be run to two crops. This is acceptable since the "worst case crop" will be tested. The Registrant can use the resulting reentry interval(s) to propose reentry intervals for other crops of similar and lesser exposure potential.

11. COMPLETION OF ONE-LINER:

Not applicable

12. CBI APPENDIX:

A copy of the protocol is being retained in the EAB secure files for use when the final data is submitted.