

US EPA ARCHIVE DOCUMENT



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Init. JH

To: William H. Miller  
Product Manager (16)  
Registration Division (TS-767)

From: Carolyn K. Offutt, Chief *Carolyn K Offutt*  
Environmental Processes and Guidelines Section  
Exposure Assessment Branch, HED (TS-769)

Attached please find the environmental fate review of:

Reg./File No.: 241-238

Chemical: Terbufos

Type Product: Insecticide

Product name: COUNTER

Company name: \_\_\_\_\_

Submission Purposes: Determine if there is a need for submission of reentry data under the criteria of 40 CFR § 158.140.

Data In: 3/14/85

Action Code 660

Date Completed: 5/8/85

EAR #: 5379

TAIS (Level II)	Days
60	1

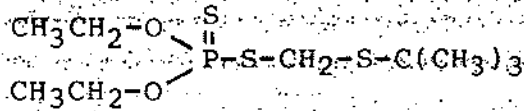
Deferrals To:

- Ecological Effects Branch
- Residue Chemistry Branch
- Toxicology Branch

REVIEW OF REENTRY DATA

1. CHEMICAL:

Terbufos: O,O-diethyl S-[(1,1-dimethylethyl)thio]methyl phosphorodithioate



2. TEST MATERIAL:

Not applicable

3. STUDY/ACTION TYPE:

In this action, RD is asking for review of the need for reentry data for soil incorporated pesticides and additional words to justify that need for terbufos if any.

4. STUDY IDENTIFICATION:

Not applicable

5. REVIEWED BY:

James D. Adams, PhD  
Chemist  
Environmental Processes and Guidelines Section

James D. Adams

5/8/1985

6. APPROVED BY:

Carolyn K. Offutt, Chief  
Environmental Processes and Guidelines Section  
Exposure Assessment Branch, HED (TS-769)

Carolyn K. Offutt

5/8/1985

7. CONCLUSIONS:

Reentry data should be required for Terbufos on the basis that it is a Toxicity Category I pesticide and that human exposure is possible. However, the Registrant should be allowed the option of placing, on the label, a requirement for protective footwear.

8. RECOMMENDATIONS:

Require data with an option for label statement similar to the one in the Fonofos Registration Standard.

9. BACKGROUND:

Reentry data are required under 40 CFR § 158.140 if the pesticide and its use meet certain toxicological and exposure criteria. The criteria are that the pesticide must have high acute toxicity [equivalent to Toxicity Category I] or a chronic toxic effect and that it would be used on crops that require cultural practices

that involve substantial human exposure to the residues.

Terbufos certainly fits the toxicity criteria for requirement of data. The Registry of Toxic Effects of Chemical Substances, 1978, states that the rabbit dermal LD<sub>50</sub> is 1100 ug/kg (1.1 mg/kg) so Terbufos is a Toxicity Category I pesticide and has a strong potential for dermal penetration.

The Agency had assumed that soil incorporated pesticides would not have a strong potential for human exposure. Since that time, Dr. Keith Maddy of the California Department of Food and Agriculture has reported that some soil incorporated pesticides have caused toxic symptoms in fieldworkers especially when the soil is wet. Subsequent to Dr. Maddy's report, Ed Johnson directed that actions should be taken to avoid the problem with other soil incorporated pesticides. Since that directive, EAB has required dissipation data for a soil incorporated pesticide with an option to the Registrant that data would not be required if protective footwear would be stipulated on the pesticide label. For an example of appropriate language, see the Registration Standard for Fonofos.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

Not applicable

11. COMPLETION OF ONE-LINER:

Not applicable

12. CBI APPENDIX:

Not applicable

13