

US EPA ARCHIVE DOCUMENT

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Init. CLW

To: H. Jacoby
Product Manager (21)
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.: 3125 - 283

Chemical: Fenamiphos

Type Product: Nematicide/Insecticide

Product name: ®NEMACUR 3 Emulsifiable Systemic Insecticide/Nemat-icide

Company name: Mobay Chemical Corp.

Submission Purposes: Review for reentry considerations of proposed amended label and registration for use on golf course turf for control of nematodes.

Data In: 3/21/85

Action Code 315

Date Completed: 7/1/85

EAB #: 5374

<u>TAIS (Level II)</u>	<u>Days</u>
60	1.5

- Deferrals To:
- Ecological Effects Branch
 - Residue Chemistry Branch
 - Toxicology Branch

REVIEW OF REENTRY DATA

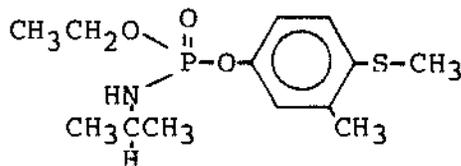
1. CHEMICAL:

Common name: Fenamiphos

Product name: NEMACUR®

Chemical name: Ethyl 3-methyl-4-(methylthio)phenyl 1-methyl-ethylphosphoramidate

Structure:



2. TEST MATERIAL:

Not Applicable

3. STUDY/ACTION TYPE:

Review of proposed label and amended registration for the use of NEMACUR® to control nematodes infesting golf course turf.

4. STUDY IDENTIFICATION:

Mobay Chemical Corporation Application for Pesticide Amendment, dated 10/9/84; Received 10/16/84; Reg. No. 3125-283; no Accession Number; Record No. 143 791 dated 3/21/85.

5. REVIEWED BY:

James D. Adams, PhD
Chemist

Environmental Processes and Guidelines Section

7/1/1985

6. APPROVED BY:

Carolyn K. Offutt, Chief

Environmental Processes and Guidelines Section
Exposure Assessment Branch, HED (TS-769)

7/1/1985

7. CONCLUSIONS:

The Registrant's proposed label appears to provide adequate protection for people who might be exposed to residues of the pesticide after application.

8. RECOMMENDATIONS:

The data listed in 40 CFR § 158.140 [reentry data] should not be required for this use of fenamiphos provided that the proposed label be attached to the product.

9. BACKGROUND:

The Registrant [Mobay Chemical Corp.] has submitted an application for pesticide amendment to allow use of NEMACUR on golf course turf for control of nematodes. Their request was for waiver of requirement of data for pesticide efficacy, but RD has requested that the Exposure Assessment Branch (EAB) review the amendment and proposed label with respect to human exposure. The question for human exposure is whether to require reentry data or not.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

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 in such a manner that substantial human exposure to the residues would be expected.

Fenamiphos certainly fits the toxicity criteria for requirement of data. The Registry of Toxic Effects of Chemical Substances, 1978, states that the rat oral LD₅₀ is 8 mg/kg and that the rat dermal LD₅₀ is 25 mg/kg so fenamiphos is a Toxicity Category I pesticide and has a strong potential for dermal penetration.

However, the potential for human exposure is less certain. The existing label states, under Reentry Statement, that "..... Any person coming in direct contact with treated water, and/or soil prior to incorporation or irrigation, or with treated wet soil after the initial irrigation, must wear protective coveralls, rubber or neoprene boots, and rubber or neoprene gloves....." Also, the proposed label states, "Irrigate immediately after treatment using a minimum of 1/2 inch of water" and, "Do not use on residential lawns or public recreational areas other than golf courses."

I believe that the specified personal-protective-equipment would provide adequate protection for the people who could be most exposed, i.e. the grounds-keepers/mowers, and that the use of 1/2 inch of irrigation water will reduce the dislodgeable foliar residues to acceptable levels for golfers who casually touch the dry surface. The prohibition of use in the other areas will prevent exposure of children or adults who might lie on the grass.

11. COMPLETION OF ONE-LINER:

Not applicable

12. CRI APPENDIX:

Not applicable