

Hpaughnessy No: 090601

EAB Log-Out Date: MAY 30 1986

Signature: 

To: Jay Ellenberger
Product Manager #12
Registration Division (TS-767C)

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



Attached please find the EAB review of...

Reg./File# : 279-2862

Chemical : CARBOFURAN

Type Product: I/N

Product Name: FURADAN

Company Name: FMC

Purpose: Confirm status of data required for forestry, 164-3; long-term field dissipation, 164-5; fish accumulation-165-4; and aquatic non target 165-5. Permission to submit final aquatic sediment study by Dec. 31, 1986

ACTION CODE: 660; 101

EAB # (s): 6126; 6612

Date Received: 11/13/85

TAIS CODE: 65

Date Completed: 5/30/86

Total Reviewing Time: 1.0 Day

Monitoring requested:

Monitoring voluntarily:

Deferrals To:

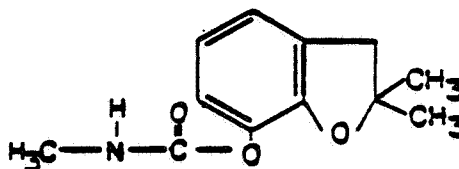
 Ecological Effects Branch

 Residue Chemistry Branch

 Toxicology Branch

1. CHEMICAL: Common Name Carbofuran (ANSI, BSI, ISO)
- Chemical name 2,3-Dihydro-2,2-dimethyl-7-benzofuranyl methylcarbamate
- Trade Name(s) Furadan, Curaterr, Pillarfuran, Yaltox.
FMC Agricultural Chemical Group;
Equitable Trading Co., Ltd. (Taiwan)

Structure



FORMULATIONS: 2-15 percent granules; flowable concentrate (4 lbs./gallon) and 75 percent W.P.

Physical/Chemical Properties Technical Carbofuran is odorless, white, crystalline solid, melting at 150-152°C. Specific gravity is 1.18 at 20°C.

Vapor pressure is 2×10^{-5} mm Hg at 33°C. Water solubility is 700 ppm at 25°C.

2.0 TEST MATERIAL:

None

3.0 STUDY/ACTION TYPE:

Request for clarification of data requirements for (a) Forestry (b) long-term field dissipation (c) accumulation in fish, and (d) aquatic non-target organism. Permission to submit final aquatic sediment study by Dec. 31, 1986.

4.0 STUDY IDENTIFICATION:

No study submitted

5.0 REVIEWED BY:

John H. Jordan, Ph.D.
Microbiologist
EAB/HED/OPP

Signature

6.0 APPROVED BY:

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

Signature

Date

30 Dec 86

7. CONCLUSION:

Forestry data (164-3) are not required, because only the nursery and ornamental uses are on the label. Residue accumulation in fish (165-4) and aquatic non-target data (165-5) are not required, because the octanol/water coefficient is $< 1,000$.

Long-term field dissipation data (164-5) are conditionally required depending on field dissipation results.

Long-term field dissipation data are required if, at the time of recommended subsequent application, the soil residue (excluding bound) is $> 50\%$ of the initial application. Since a data gap exists, a decision will be reserved until field dissipation data are available.

8. RECOMMENDATIONS:

We recommend that the registrant be informed of the above conclusions and also that December 31, 1986 is an acceptable date for submission of the aquatic sediment study.

9. BACKGROUND:

A. Introduction

The registrant requested clarification of several data requirements specified in section 3.

B. Direction for use

Carbofuran is a broad spectrum carbamate insecticide and nematocide registered for use on various field and vegetable crops, rice, ornamentals, and cottonwood and to treat pine seedling roots prior to transplanting. Of the total domestic carbofuran use, $\sim 62\%$ is applied to field corn and $\sim 21\%$ is applied to sorghum. Only 2% of the carbofuran used is applied for the control of nematodes. Application rates range from 0.125 to 10 lb ai/A. Three intrastate product formulations contain ordram combined with carbofuran. Single active ingredient formulations of carbofuran consist of 2-15% G, 75% WP, and 4 lb.gal FLC. These formulations may be applied with ground equipment and are generally soil incorporated immediately after application. Carbofuran may also be applied as a postemergent treatment by banding or sidedressing the row, or aerially. Applicators must be certified or under the direct supervision of applicators certified to apply the WP and FLC formulations.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: None

11. COMPLETION OF ONE-LINER: One-Liner not initiated to date

12. CBI APPENDIX: No CBI included.