109801
SHAUGHNESSEY NO.

(9)
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 9-16-80 OUT 9-17-80

FILE OR REG. NO. 359-EUP-LO

PETITION OR EXP. PERMIT NO. 062402

DATE DIV. RECEIVED 9-10-80

DATE OF SUBMISSION 8-25-80

DATE SUBMISSION ACCEPTED

TYPE PRODUCT(S): I, D, H, F, N, R, S FUNGICIDE

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. E. WILSON (21)

PRODUCT NAME(S) CHIPCO 26019 (ROVRAL)

COMPANY NAME RHONE-POULENC INC.

SUBMISSION PURPOSE EUP FOR USE ON ALMONDS

| SHAUGHNESSEY NO. | CHEMICAL & FORMULATION | % A. I. |
|---|---|---|
| 109801 | 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4- | |
| | dioxo-1-imidazolidinecarboxamide | 50.0% |
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Chipco 26019 (Rovral)

## 100 Experimental Use Label Information

### 100.1 Pesticide Use

Fungicide for use on almonds.

### 100.2 Formulation Information

ACTIVE INGREDIENT:
3-(3,5-dichlorophenyl)-N-(1-methylethyl)
-2,4-dioxo-1-imidazolidinecarboxamide ..... 50.0%
INERT INGREDIENTS ..... 50.0%

### 100.3 Application Methods, Directions, Rates

Rovral is a wettable powder formulation for the evaluation of control of monilinia brown rot blossom blight on almonds. Apply as a foliar spray in sufficient water to obtain thorough coverage (100-400 gallons per acre by ground application and 20 gallons by aerial application). The spray mixture should not be allowed to stand overnight as some breakdown of the product may occur from prolonged delays, particularly in water with a high pH. Maintain agitation during spray operations and apply with properly calibrated application equipment. Do not graze animals in treated orchards. Do not feed treated cover crops to animals. Do not feed almond hulls to animals. The almonds must be custom hulled and the hulls destroyed.

Apply at "red tip," and if conditions are favorable for disease development make a second application at full bloom.

Use 0.25 lbs. product/100 gallons and 1 lb. product per acre per application.

### 100.4 Target Organisms

Monilinia brown rot blossom blight on almonds.

### 100.5 Precautionary Labeling

Keep out of lakes, streams, and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

100.6 Proposed EUP Program

1981

STATES, AMOUNT OF PESTICIDE TO BE USED AND ACREAGE

- Ground Application -

| STATE | ROVRAL LBAI/A | NO. OF TESTS | TOTAL ACREAGE | AVG. NO. APPLICATIONS | TOTAL lbs ai |
|---|---|---|---|---|---|
| CA | 0.5 | 3 | 6 | 2 | 6.0 |

- Aerial Application -

| STATE | ROVRAL LBAI/A | NO. OF TESTS | TOTAL ACREAGE | AVG. NO. APPLICATIONS | TOTAL lbs ai |
|---|---|---|---|---|---|
| CA | 0.5 | 2 | 10 | 2 | 10.0 |

1982

STATES, AMOUNT OF PESTICIDE TO BE USED AND ACREAGE (continued)

The second year EUP will require approximately 30.0 lbs. ai of Rovral to be applied to an estimated 16 acres.

PROGRAM DETAILS

| | |
|---|---|
| a. Target Pest: | Brown Rot (Monilinia sp.) |
| b. Crop: | Almonds |
| c. Sites: | Orchards |
| d. Major Geographic Areas: | See Section 100.6 |
| e. Desired Months for Applications to Begin: | February |
| f. Use Pattern: | 2 blossom period applications |
| g. Plot Size: | 2 acres - ground application<br>5 acres - air application |
| h. No. of Replications: | None; the plots will be divided into at least 4 sub-plots for evaluations |
| i. Dosage Rate: | 0.5 lb ai/A |
| j. Method of Application: | Commercial application equipment |
| k. Season of Use: | February - May |
| l. Timing of Applications: | 1. Red tip<br>2. Full bloom |

## EXPERIMENTAL USE PERMIT PARTICIPANTS

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## EXPLANATION TO JUSTIFY THE QUANTITY OF ROVRAL REQUESTED

- A total of 6 acres will be treated with Rovral by ground application. The tests will have a maximum of 2 applications. The rate per acre will be 0.5 lb ai/A. Therefore,

  6 acres x 2 x 0.5 = 6.0 lbs ai

- A total of 10 acres will be treated with Rovral by aerial application. The tests will have a maximum of 2 applications at 0.5 lb ai/A. Therefore,

  10 acres x 2 x 0.5 = 10 lbs ai

- The total amount of Rovral 50WP needed for the first year of the almond EUP will be 16.0 lbs ai or 32.0 lbs. formulated for 1981.

- The total amount of Rovral 50WP needed for the second year of the almond EUP is estimated to be 30.0 lbs ai or 60.0 lbs. formulated.

## OBJECTIVES

a. The major objective of this program is to obtain additional efficacy and phytotoxicity data for Rovral applied under commercial conditions. Residue data will also be taken.

b. Efficacy and phytotoxicity data will be taken from the aerial tests, in addition to residue data.

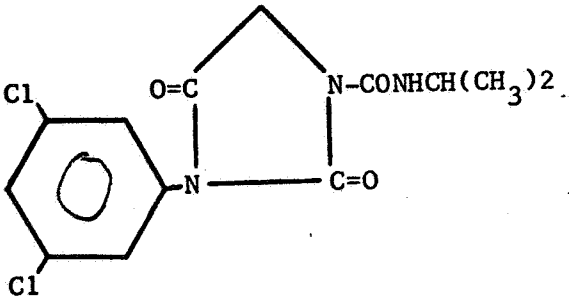
c. Long Range Testing Plans - application of Rovral as a fungicide for almonds will involve a two-year program under the Experimental Use Permit. The second year of the EUP will be devoted to testing for different diseases.

101. Physical and Chemical Properties

101.1 Chemical Name

3-(3,5-dichlorophenyl)-N-(1-methylethyl)
-2,4-dioxo-1-imidazolidinecarboxamide

101.2 Structural Formula




101.3 Common Name

Iprodione

For more information on Physical and Chemical properties, see EEB review by J. Tice, 12/4/78.

102. Behavior in the Environment

See EEB review by J. Tice, 12/4/78. In summary, iprodione has a relatively long half-life; about 20 days in soil (pH6) and 4 to 7 days in water. Bioaccumulation is not considered a problem.

103. Toxicological Properties

Taken from EEB review by J. Tice, 12/4/78.

| | | | |
|---|---|---|---|
| 1) Mammal | | | |
| rat | oral $LD_{50}$ | 3,700 mg/kg (technical) | |
| rat | oral $LD_{50}$ | 12,500 mg/kg (50% a.i.) | |
| 2) Avian | oral $LD_{50}$ | | |
| Bobwhite quail | | .930 mg/kg | core |
| 3) Fish | 96 hr. $LC_{50}$ | | |
| Rainbow trout | | 6.7 ppm | core |
| Bluegill sunfish | | 2.25 ppm | core |
| Channel catfish | | 2.63 ppm | core |
| 4) Aquatic invertebrate | $LC_{50}$ | | |
| Daphnia magna | | 0.43 ppm | core |
| Daphnia magna | | 7.2 ppm | core |
| 5) Avian dietary | $LC_{50}$ | | |
| Bobwhite quail | | 9200 ppm | core |
| Mallard duck | | 20,000 ppm | core |

104. Hazard Assessment

Non-target Organisms:

Considering the limited use proposed in this EUP, and the moderate toxicity of this fungicide, it is unlikely that adverse effects will result from using Chipco 26019 on almonds experimentally.

Endangered Species

No effect to endangered species is anticipated.

105. Conclusions

The Ecological Effects Branch has no objection to this EUP. Prior to consideration of registration, data may be required, but this would be determined during the risk assessment at that time.

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Wildlife Biologist, Section 2, EEB

Norman Cook 9-23-80
Norm Cook
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