

US EPA ARCHIVE DOCUMENT

109801
SHAUGHNESSEY NO.

20
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 8-3-84 OUT 9-14-84

FILE OR REG. NO. 359-685

PETITION OR EXP. PERMIT NO. _____

DATE OF SUBMISSION 6-28-84

DATE RECEIVED BY HED 8-2-84

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RD ACTION CODE/TYPE OF REVIEW 330/Amendment

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

DATA ACCESSION NO(S). _____

PRODUCT MANAGER NO. H. Jacoby (2)

PRODUCT NAME(S) Rovral

COMPANY NAME Rhone - Poulenc Inc.

SUBMISSION PURPOSE Proposed conditional Registration of onion Use

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.
<u>109801</u>	<u>Iprodione: 3-(3,5-dichlorophenyl)-N-</u>	
	<u>(-methylethyl)-2,4-dioxo-1-imidazol-</u>	
	<u>idinecarboxamide</u>	<u>50</u>

PESTICIDE NAME - Iprodione

100 Submission Purpose and Label Information

100.1 Submission Purpose and Pesticide Use

Proposed amendment to add onions to the current label.

100.2 Formulation Information

(Excerpted from specimen label)

ACTIVE INGREDIENT:

Iprodione: 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide.....50.0%
 INERT INGREDIENTS.....50%

100.3 Application Methods, Directions, Rates

(Excerpted from direction for use on onions)

HOW TO USE ROVRAL ON ONIONS

Apply Rovral using ground equipment in accordance with the directions in the following table:

ONIONS			
DISEASE	DOSAGE RATE LBS. PRODUCT/ ACRE	GALLONS PER ACRE	SPRAY SCHEDULE
White Rot (<u>Sclerotium</u> <u>cepivorum</u>)	2.0 +	15-20	Apply Rovral in the furrow at planting. Position nozzles to treat the seeds and the soil that will fill the furrow. For in furrow application, use a spray pressure of 15-20 PSI.
	2.0	40-75	With fall planted onions, if conditions are favorable for disease development, apply a second directed spray to the base of the plants in the spring.
Botrytis leaf blight (<u>Botrytis squamosa</u>)	1.5	50-100	Apply as a foliar spray as soon as conditions become favorable for disease. Continue applications on a 7-day interval as long as conditions favor disease development.

Purple blotch
(Alternaria porri)

A single, flat fan, or cone nozzle should be centered and adjusted to provide complete coverage of each row. Up to 10 applications can be made per season. Do not apply within 7-days of harvest.

NOTE TO USER: The following crops may be rotated after harvest: Garlic leafy vegetables.

The following crops may be rotated the year following treatment: Root crops, cereal grains, soybeans and tomatoes.

101. Hazard Assessment

101.1 Discussion

Preliminary data reported in the USDA's Agricultural Statistics - 1983 indicates the U.S. onion growers planted 124,220 acres of onions in 1982.

The following table reports major states and ^{there} there onion acreage for 1982:

1982 Onion Acreage

<u>State</u>	<u>Acres</u>
California (spring)	7,900
" " (summer)	28,700
Texas (spring)	19,400
" " (summer)	6,300
New York (storage)	14,000
Oregon (storage)	10,000
Colorado (storage)	9,300
Michigan (storage)	7,300
	<u>102,900</u>
11 Other onion producing States	21,320
U.S. Total	<u>124,220</u>

The proposed label indicates 2 lbs of 50% product would be recommended as the maximum application rate for onions. At the 1.5 lbs of product/acre rate 10 applications can be made. The label also bears directions for stonefruits and almonds. Concerning the wildlife utilization ~~of~~ of onions, Gusey and Maturgo (1973) report upland game birds, songbirds, rabbits, and deer use onions fields for feeding, loafing, and cover.

Gusey, W.F. and Maturgo, Z.D. (1973) Wildlife Utilization of Croplands, Environmental Affairs Shell Oil Company, Houston, Texas.

101.2 Likelihood of Adverse Effects to Nontarget Organisms

Iprodione is not expected to result in hazard to non-target organisms. Bascietto's recent EEB review on peanuts (4/9/84) adequately describes the toxicity and exposure expected to nontarget species.

"Iprodione is practically non-toxic to mammalian and avian species with LC₅₀'s for nontarget indication species in the 10,000-20,000 ppm range. Aquatic indicator species are more sensitive, however, with LC₅₀'s ranging from 0.43 - 7.2 ppm (see chemical profile in review jacket 109801 for Iprodione). Theoretical calculations indicated that the rate proposed in this EUP would not result in a hazard to aquatic species. A 2 lb. per acre direct application to a 6" acre layer of water = 1.5 ppm. We except that even with significant runoff (e.g. 5% per acre) a non-lethal residue level would result in 6" - acre layer of water."

Concerning beneficial insects, no hazard is expected to bees due to the low toxicity of iprodione, (per comm. A. Vaughan). Minimal exposure is expected to many other beneficial insects due to the limited acreage dispersion of the onion crop. Based on this minimal hazard is expected for nontarget species.

101.3 Endangered Species Consideration

Minimal hazard is expected to endangered species as a result of the use of iprodione on onions. Of most concern are invertebrates such as snails, mussels, and the Socorro isopod. However, if exposure occurs to the mussels it would be expected to be minimal due to the small acreage of onions in the mid-western states and the high dilution of runoff expected in lotic habitat. Concerning the Socorro isopod, according to the 1978 Census of Agriculture onions are not grown in Socorro County, N.M. The Chittenango ovate amber snail is found up stream from the onion growing area of that county (per comm. Les Touart). Based on the minimal hazard is expected to endangered species.

101.4 Adequacy of Toxicity Data

The presently available data is adequate for the registration of iprodione for use on onions.

101.5 Adequacy of Labeling

The proposed label is sufficient.

102 Classification

The toxicity parameters do not exceed the restricted criteria. Based on this restriction will not be recommended.

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Conclusions

EEB has completed an incremental risk assessment (3(c)(7) finding) of the proposed conditional registration of iprodione for use on onions. Based upon the available data, EEB concludes that the proposed use provides for a significant increase in exposure, but not in risks to nontarget organisms.

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Date

9-14-84

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