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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

JAN 12 1984

MEMORANDUM

SUBJECT: 84-FL-03. Proposed Section 18 exemption for the use of iprodione on head and cos lettuce in Florida.

FROM: Edward Zager, Chemist
Residue Chemistry Branch
Hazard Evaluation Dvision (TS-769)

Edward Zager

THRU: Charles L. Trichilo, Chief
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Hazard Evaluation Division (TS-769)

TO: Emergency Response Section
Registration Division

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

The Florida Department of Agriculture and Consumer Services requests a Section 18 exception for the use of iprodione on cos and head lettuce to control Rhizoctonia Solani.

The proposed use calls for up to three ground applications at the rate of 1 lb act/A in 40-100 gallons of water/A with a 14-day PHI.

We consider the residue of concern in plants to be the parent compound 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxoimidazolidine-1-carboxamide, the isomer RP 30228 [3-(1-methylethyl)-N- 3,5-dichlorophenyl)-2,4-dioxo-1-imidazolinecarboxamide] plus the metabolite RP 32490 [3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide]. These are all determined by the analytical methods used to generate the available residue data (Rhodia Method No. 151 or minor modifications thereof). Recoveries from lettuce samples fortified with the above components at levels 0.1-10 ppm ranged from 61-133% (N. Dodd, PP#3G2801 and Report 30350).

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In our review of the 9/27/83 amendment to PP#3F2840 (K. Arne, 11/21/83) we recommended for the establishment of a 15 ppm tolerance for residues of the fungicide iprodione, its isomer RP 30228 and its metabolite RP 32490 in or on head lettuce.

Residue data submitted in support of PP#'s 3G 2801 and 3F 2840 reflect studies conducted in NY, NJ, WI, FL and CA. In most experiments both lettuce heads and wrapper leaves were examined for residues. For lettuce heads the maximum combined residue for parent isomer and metabolite as a result of 1-3 applications of 1-2 lbs act/A and PHI's of 9-61 days was 0.17 ppm. Much higher residues wer found in lettuce leaves with up to 62 ppm present on the day of the last of 3 applications of 2.0 lbs act/A The highest residue found in leaves at PHI's of 14 days or longer was 5.89 ppm at 33 days after one application of 1.0 lb act/A Accession Nos. 071426, 07174, 071271.

Additional residue data from CA and were submitted with a 1983 California Section 18 request. Following 3 applications at the rate of 1 lb act/A residues of iprodione, its isomer RP 30228 and its metabolite RP 32490 ranged from 2.75-26.3 ppm in or on wrapper leaves and 0.27-32 ppm in or on trimmed heads at a 14 day PHI. Since relative weights of untrimmed heads and leaves were given, it was possible to calculate residues of iprodione its isomer and metabolite on the whole plant. These residues ranged from 1.23-11.48 ppm in untrimmed head lettuce at the proposed 14 days PHI Accession No. 071983. Residues in cos lettuce are expected to be somewhat higher, particularly in the loose closing types.

There are no feed involved in this use. Consequently these will be no problem with secondary residues in meat, milk, poultry and eggs.

Conclusions

1. Combined residues of iprodione, its isomer RP 30228 and its metabolite RP 32490 in or on on head and cos lettuce will not exceed 15 ppm as a result of this use.

2. There are no feed items involved in this use. Consequently, there will be no problems with secondary residues of iprodione in meat, milk poultry and eggs.

3. Rhodia Method 151 in PP# 3G2801 may be used for enforcement.

Recommendation

TOX considerations permitting we have no objections to the issuance of this Section 18 exemption. An agreement should be made with FDA regarding the legal status of the treated lettuce in commerce.

TS-769:RCB:E.Zager:vrg:CM#2:RM810:X77324:1/10/84
cc: Sect. 18 S.F., Circu, iprodione Reviewer, R.F.
RDI: R. Hummel, 1/9/84: R. Schmitt, 1/9/84