10-27-82

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

OCT 27 1982

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: 82-FL-36. Proposed Section 18 exemption for the use of iprodione on lettuce (including romaine), endive and escarole in Florida.

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

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

TO: Emergency Response Section
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

The Florida Department of Agriculture and Consumer Services requests a Section 18 exemption for the use of Rovral (iprodione) to control various fungal diseases on lettuce (including romaine), endive and escarole.

The proposed use would permit 3 ground applications 10 days apart at the rate of 1 lb act/A in 40-100 gallons of water with a 10 day PHI. It is estimated that a maximum 23,800 acres of lettuce and related crops will be treated under this exemption.

Section 18 exemptions for the use of iprodione on lettuce have been issued to N.Y. and WI in 1982.

The metabolism of iprodione in plants was discussed in our review of PP#0G2402. The residue of concern is iprodione 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidine-carboxamide and its isomer RP 30228 (3-(1-methylethyl)-N-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide).

The analytical method used to generate the available residue data was Rhodia Analytical Method No.151. The method determines iprodione, its isomer RP 30228 and a metabolite of iprodione RP 32490 (3-(3,5-dichlorophenyl)-2,4-dioxo-imidazolidine carboxamide). The method has been found adequate for enforcement purposes (PP#0G2402, L. Propst, 11/28/80).

Residue studies were conducted in NY (3), WI (4) and FL (2). Following 3 applications at the rate of 1 lb act/A residues of the parent iprodione in trimmed lettuce heads ranged from ND (<0.05 ppm) to 0.12 ppm at PHI's of 20-23 days. In wrapper leaves residues were much higher - 0.37 ppm at 34 days to 1.37 ppm at 22 days.

No residue data reflecting 3 applications of 1 lb/A and a 10 day PHI are available. However, following two applications at the rate of 2 lbs act/A (2X) residues of iprodione were <0.05 ppm in lettuce heads and ranged from 0.07-1.47 ppm in wrapper leaves at PHI's of 9-13 days.

No detectable (<0.05 ppm) residues of RP 30228 and RP 32490 were found in any lettuce or wrapper leaf samples.

Based on the above data and translating residue data for lettuce wrapper leaves to endive and escarole, we estimate that residues of iprodione and its isomer RP 30228 will not exceed 2 ppm in or on lettuce (including romaine), endive and escarole from this use.

Meat, Milk, Poultry and Eggs

There will be no secondary residues of iprodione in meat, milk, poultry and eggs provided a restriction against feeding treated wrapper leaves to livestock is added to the Section 18 label.

Conclusions

1. Residues of iprodione and its isomer RP30228 will not exceed 2 ppm in or on lettuce (including romaine), endive and escarole as a result of the proposed use.

2. Provided a restriction against the feeding of treated wrapper leaves to livestock is added to the Section 18 label, the proposed use will not lead to secondary residues in meat, milk, poultry and eggs.

Recommendation

TOX considerations permitting and provided a restriction against the feeding of treated wrapper leaves to livestock is added to the Section 18 label, we have no objections to the proposed exemption. An agreement should be made with FDA regarding the legal status of the treated commodities in commerce.

cc: Section 18 S.F.
Iprodione S.F.
Circu
Reviewer
R.F.

TOX

RDI:Section Head:RJH:Date:10/21/82:RDS:Date:10/22/82
TS-769:RCB:Reviewer:E.Zager:LDT:X77324:CM#2;rm;810:Date:10/25/82