4-15-85

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

APR 15 1985

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: 85-CA-12: Proposed Section 18 Exemption for the Postharvest Use of Iprodione (Rovral) on Cherries in California. No accession #. RCB # 837.

FROM: J. Garbus, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Andrew Rathman, Section Head
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Hazard Evaluation Division (TS-769)

TO: S. J. Austin / D. Stubbs, PM-41
Emergency Response Section
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

The California Department of Food and Agriculture requests the reissuance of the specific exemption granted May 23, 1984 to use iprodione (Rovral) as a postharvest spray or dip to control fungal decay on sweet cherries. In addition, an action level is required for sweet cherries treated under this exemption. The request is for all cherry-growing areas in the state and may involve up to 45,000 tons of fresh and processed cherries. The exemption is requested for the period from May 1, 1985 to August 1, 1985.

A permanent tolerance of 20 ppm in or on sweet or sour cherries is established for the fungicide iprodione [3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide], its isomer [3-(1-methylethyl)-N-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide], and its metabolite [3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide]. (40 CFR 180.399)

The proposed use to inhibit postharvest fruit decay involves one application to freshly harvested fruit as a spray or dip at a concentration of 1 lb ai/100 gallons (1200 ppm).

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Current registered use permits multiple preharvest applications of iprodione to cherries at 1.0 lb ai/A as a foliar treatment from 5 weeks prior to harvest up to and including the day of harvest.

The metabolism of iprodione is adequately understood and is discussed in RCB's review of PP# 8G2087 (A. Rathman, memo of 3/2/79) For the purposes of this Section 18 exemption, the residues of concern are the parent compound, its isomer, [3-(1-methylethyl)-N-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide], and its metabolite [3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide].

The analytical method (Rhone Poulenc Procedure 151) which determines the parent compound, its isomer, and its metabolite is discussed in our review of PP# 2F2596 (R. Perfetti, memo of 5/13/82). The method has undergone a succesful try out and is included in PAM II.

No new residue data are submitted in this request for the reissuance of the 1984 Section 18 exemption.

Residue data for the postharvest use of iprodione on cherries were submitted with the request in 1984. At that time, the State of California also requested a Section 24(c) registration for the postharvest use. RCB discussed the data as part of its review of the Section 24(c) request (S. Malak, memo of 6/6/84).

Field trials were conducted in California during the 1983 growing season in which trees received preharvest applications of iprodione at 0.75 lb ai/A (3/4X). After harvest, cherries were sprayed to dripping with a solution of 1200 ppm iprodione (1 lb/100 gallons). Analyses showed that residues of iprodione and its metabolite were 3.28 ppm for a postharvest application only, and 5.92 ppm for both a pre- and postharvest application.

Residue data previously submitted in connection PP# 8G2087 revealed that the combined residues of iprodione, its isomer and its metabolite could range up to 17.34 ppm following multiple preharvest applictions. As the total level of iprodione residues in and on sweet cherries resulting from both preharvest and postharvest maximum applications could exceed the established tolerance of 20 ppm, RCB suggested that an action level of 30 ppm be established to cover total residues that could result from the proposed Section 18 use. The 1984 Section 18 exemption issued May 23, 1984 granted the 30 ppm action level.

As no feed items are involved in this use, there is no concern with secondary residues in meat, milk, poultry, and eggs.

As no new data has been submitted to the contrary and as the situation requiring the use of iprodione has not changed

since 1984, we see no reason for not granting the reissuance of this Section 18 exemption.

Conclusions

1. As a result of the use proposed in this Section 18 exemption total residues of iprodione, its isomer, and its metabolite in or on sweet cherries may exceed the established tolerance of 20 ppm. The 30 ppm level granted for an identical Section 18 exemption in 1984 remains adequate.

2. An adequate analytical method for enforcement exists and is included in PAM II.

3. No secondary residues will occur in meat, milk, poultry, or eggs.

Recommendations

TOX considerations still permitting, we recommend that the Section 18 exemption be reissued at the action level of 30 ppm. Some administrative agreement should be made with FDA regarding the status of treated crops in commerce.

cc: Iprodione S. F., R F , Circ., Sect. 18 F., Reviewer
RDI:ARR:4/11/85:RDS:4/11/85
TS-769:RCB:CM#2:RM810:XT3043:JG:jg:4/15/85