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Proposed Section 18 Exemption for the use of Rovral (Iprodione) on stone fruits in Michigan

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The State of Michigan Department of Agriculture requests a Section 18 Exemption for the use of 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidine-carboxamide (Iprodione, RP 26019) on stone fruits grown in 14 western counties of Michigan.

PP# 8G2087 proposing temporary tolerances for residues of Iprodione and its isomer 3-(1-methylethyl)-N-(3,5 dichlorophenyl)-2,4-dioxo-imidazolidine carboxamide is currently in reject status (Aug. 15, 1979, S. Hummel).

The proposed use would permit applications of Rovral (53.16% technical Iprodione) to the following stone fruits: sweet and sour cherries, peaches, plums and prunes.

Applications will be made at 0.75 lb act/A to 1.0 lb act/A.

We recommend that the application rate be in terms of lbs of the fungicide per 100 gallons of spray volume with a maximum number of gallons of spray solution that may be applied per acre. This would result in a more consistent application rate to the fruit regardless of the size of the trees in the orchard. Thus, the application rate should be expressed as follows:

Cherries - Apply WP 0.075 - 0.1 lb act/100 gals of spray with a maximum of 1000 gals of spray /acre.

Peaches, plums and prunes - Apply 0.15-0.30 lb act/100 gals of spray with a maximum of 500 gals of spray /acre.

For brown rot blossom blight, three blossom sprays will be applied, the first at the pink bud to early bloom stage, the second at full bloom and the third at petal fall.

For fruit brown rot, two pre-harvest applications will be made, the first applied 2 weeks before harvest and the second applied at harvest or up to seven days prior to harvest.

The metabolism of Iprodione was discussed in our review of PP# 8G2087 (A. Rathman 3/2/79). For the purposes of this Section 18 exemption, we consider the parent compound and the metabolite (isomer) 3-(1 methylethyl) - N-(3,5-dichlorophenyl)-2,4-dioxo-imidazolidine-carboxamide to be the residue of concern.

A summary of 16 residue trials conducted in 1975-6-7 was submitted with this request. The studies were conducted in CA, GA, MI, NC, NJ and OR.

Cherries

Following five applications of 1 lb act RP 26019 per acre, residues of the parent compound ranged up to 12.00 ppm, at the proposed 0- day PHI. Residues of the metabolite RP 30228 ranged up to 0.06 ppm.

Peaches

Residues of RP 26019 ranged up to 10.55 ppm at 1 day after 3 applications of 1 lb act/acre. The highest residue found at 0-days was 5.85 ppm. No residues of RP 30228 were found at the 0-day PHI.

Plums, prunes

Residue of RP 26019 ranged up to 0.97 ppm on fresh fruit at 1-day after 3 applications of 1 lb act/acre. The highest residue value reported at 0-days was 0.74 ppm. No residues of RP 30228 were found at any PHI.

Residue data submitted in connection with PP 862087 indicate that there is a 2x concentration in the amount of residue on drying the prunes.

Based on the above residue data, we estimate that residues of Iprodione and its metabolite; 3-(1-methylethyl)-N-(3,5 dichlorophenyl)-2,4-dioxo-imidazolidine-carboxamide will not exceed 15 ppm in cherries, 15 ppm in peaches, 3 ppm in plums and prunes and 6 ppm in dry prunes as a result of the proposed use.

Meat, Milk, Poultry and Eggs

There are no animal metabolism studies available in this submission. However, if the use is modified to restrict the feeding of cover crops to animals, we could place this use into category 3 of Sec. 180.6 (a).

Conclusions

1. Residues of Iprodione and its metabolite 3-(1-methylethyl)-N-(3,5 dichlorophenyl)-2,4-dioxo-imidazolidine will not exceed 15 ppm in or on cherries and peaches, 3 ppm in or on plums and prunes and 6 ppm in dry as a result of the proposed use.

2. The application rate should be expressed in terms of lbs of product /100 gals of spray volume with a maximum number of gallons/A rather than lbs/A. Thus, the application rate should be expressed as follows:

Cherries - Apply 0.075-0.1 lb act/100 gals of spray with a maximum of 1000 gals of spray/acre.

Peaches, plums and prunes - Apply 0.15-0.30 lb act/100 gals of spray with a maximum of 500 gals of spray/acre.

3. A restriction against grazing animals in treated orchards and against feeding treated cover crops to animals should be added to the Section 18 label.

Recommendation

TOX considerations permitting and provided the Section 18 is amended as recommended in conclusions 2 and 3, we have no objections to the proposed Section 18 exemption. An agreement should be made with FDA regarding the legal status of the treated commodities in commerce.

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cc: Section 18 SF
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RF ✓
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