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

APR - 1 1991

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: 91-TX-09. Section 18 Exemption. Iprodione on Cabbage. No MRID #. DEB # 7751.

FROM: Leung Cheng, Chemist
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Health Effects Division (H7509C)

THROUGH: Francis B. Suhre, Section Head
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TO: Libby Pemberton, PM # 41
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and

Toxicology Branch
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The Texas Department of Agriculture has requested a Section 18 registration for the use of Rovral^{R} fungicides (EPA Reg # 264-453 & 264-482) on cabbage grown in the lower Rio Grande Valley of Texas. The active ingredient is 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide or iprodione.

Tolerances are established for residues of iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP32490) in or on various fruits and vegetables including lettuce (head and leaf) at 25.0 ppm. Tolerances on meat, milk, poultry and eggs are established at 0.5-3.0 ppm [40 CFR 180.399].

The proposed use would permit ground applications at 0.5-1.0 lb ai/A/treatment at 7 to 14-day intervals. A maximum of 4 treatments is permitted with a PHI of 14 days.

Cabbage is in the same crop group as lettuce. The residues of concern on cabbage are iprodione, its isomer 3-(3,5-dichloro-

phenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP32490).

A Registration Standard has not been completed for iprodione.

No residue data were submitted for cabbage. CBRS will estimate iprodione residues on cabbage as a result of this proposed use on the basis of the lettuce (head) residue data.

Data for head lettuce grown in CA and AZ and treated with 3 x 1.0 lb ai/A and harvested after 7-14 days were submitted in PP#3F2840. Residues of iprodione, its isomer RP30228 and its metabolite RP32490 ranged from 2.75-26.3 ppm in/or wrapper leaves and 0.27-32 ppm in/or trimmed heads. On a whole plant basis, these residues ranged from 1.23-11.48 ppm in untrimmed head lettuce. The estimation was possible because relative weights of untrimmed heads and leaves were given (wrapper leaves account for 30-40% of the weight and the head accounts for 60-70%, K. Arne, 11/21/83). Residue data for leaf lettuce showed total iprodione residues up to 22.5 ppm following 3 x 1.0 lb ai/A and PHI's of 10-15 days (PP#7F3481, M. Nelson, 4/8/87). Data resulting from 4 applications on either head or leaf lettuce were not available.

The above lettuce data were not produced by Craven Labs.

We estimate the combined residues of iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP32490) are not likely to exceed 15 ppm as a result of this proposed use provided that the maximum number of treatments per season is reduced from 4 (on the proposed label) to 3.

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

CONCLUSIONS AND RECOMMENDATION

1. The residues of concern on cabbage consist of iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP32490).

2. The maximum number of treatments permitted should be revised to 3 (from 4 as proposed on the label) since no data reflecting 4 applications are available.

3. Method I in PAM II may be used for enforcement.

4. Combined residues of iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP32490) are not likely to exceed 15 ppm in/on cabbage if only 3 treatments is permitted on the label.

5. There will be no problems with transfer of residues to meat, milk, poultry and eggs from this proposed use.

6. Analytical reference standards are available at the Pesticides and Industrial Chemicals Repository, RTP, NC.

7. Residue data used to estimate iprodione residues in/on cabbage were not produced by Craven Labs.

TOX considerations permitting, and provided only 3 treatments are permitted, CBRS has no objections to this Section 18 request. An agreement should be made with the FDA regarding the legal status of the treated cabbage in commerce.

cc:Circ, RF, Section 18 F, Cheng, DRES, PIB/FOD
RDI:FSuhre:3/27/91:EZager:3/27/91
H7509C:CBII-RS:LCheng:CM#2:RM810:3/27/91:02: