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

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MAR 20 1992

MEMORANDUM

SUBJECT: ID #92TX0006 (CBTS #9427; Barcode #D174817). Iprodione (Rovral®) on Celery in Texas. Section 18 Exemption (No MRID #).

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and

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Introduction

The Texas Department of Agriculture requests a Section 18 specific emergency exemption for use of the fungicide iprodione [3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide] to control Rhizoctonia solani and Sclerotinia sclerotiorum on celery in Texas. The formulations to be used are Rovral® 50 WP Fungicide (EPA Reg. No. 264-453) and Rovral 4 Flowable Fungicide (EPA Reg. No. 264-482).

Tolerances are established for combined residues of iprodione, 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 on various raw

agricultural and processed commodities at levels ranging from 0.1 to 300 ppm [40 CFR 180.399(a) and (c), 40 CFR 185.3750, and 40 CFR 186.3750]. Tolerances are also established for combined residues of iprodione, its isomer 3-(1-methylethyl)-N-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide, and its metabolites 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide and N-(3,5-dichloro-4-hydroxyphenyl)-ureido-carboxamide on animal commodities at levels ranging from 0.5-5.0 ppm [40 CFR 180.399(b)].

No previous Section 18 requests for iprodione on celery have been reviewed by CBTS.

A petition for a tolerance of iprodione on celery is in reject status (PP#7E3554, M.Nelson, 8/25/87).

Under the proposed Section 18, a total of 7,200 lbs ai (14,400 lbs. of Rovral 50WP or 1,800 gals. of Rovral 4F) would be used on a total of 1,800 acres in Texas during 1992. (The requested expiration date for the specific exemption is one year from approval.)

The performing laboratory for residue data discussed in this review was Rhone-Poulenc Inc.

Proposed Use

Celery fields in the four counties of the Lower Rio Grande Valley of Texas (Hidalgo, Starr, Cameron, and Willacy counties) will be treated. Applications will be made with ground equipment at the rate of 1.5-2.0 lbs. Rovral 50 WP/A (0.75-1.0 lb. ai/A) or 1.5-2.0 pts. Rovral 4 F/A (0.75-1.0 lbs ai/A). The first application will be made after transplanting. Repeat applications can be made at 7-14 day intervals. The maximum number of applications per season is 4. A one day PHI will be observed.

Nature of the Residue

The nature of the residue in celery is adequately understood for the purposes of this proposed Section 18. The residues of concern in celery are iprodione, 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 (PP#7E3554, M.Nelson, 8/25/87).

Analytical Method

Adequate analytical methods are available for enforcement in PAM II and PP#7E3554. (See PP#7E3554, M. Nelson, 8/25/87.)

Residue Data

Residue data for iprodione on celery were submitted in connection with PP#7E3554, MRID#402728-01 (M. Nelson, 8/25/87). Residue data were obtained from 7 field trials in the states of CA, FL, and MI during 1984. The data reflected 11-13 applications at the rate of 1 lb ai/A (1X) and a 0-day PHI or 11-13 applications at the rate of 2 lb ai/A (2X) and a 0-day PHI. Residues were 6.3-49.1 ppm resulting from the 1X treatment and 7.7-71.0 ppm resulting from the 2X treatment.

PP#7E3554 is in reject status for the following reason:

> "Statistical analysis is presented to prove the 49.1 ppm (1X) value is an outlier, leaving 19.6 ppm as the maximum 1X residue. The proposed tolerance (25 ppm) is based on this value. If one applies the statistics (Dixon test, ref. Statistical Manual of the AOAC) to the (2X) 71.0 ppm value, it is NOT an outlier (95% Confidence). When normalized to 1X, 35.5 ppm is the maximum residue resulting form the proposed use. A revised Section F proposing a 40 ppm tolerance is needed."

The proposed use for the Section 18 differs from that in the petition regarding the number of applications (limited to 4 in the Section 18) and in the PHI (1-day in the Section 18 rather than 0-day). However, no residue data are submitted with the Section 18 request.

CBTS concludes that residues on celery resulting from the proposed use would be less than 40 ppm. Residue data reflecting the proposed use would be needed for a more exact determination.

Meat, Milk, Poultry and Eggs

There are no feed items connected with this use on celery. Therefore, no secondary residues are expected in meat, milk, poultry and eggs as a result of this use.

Conclusions

1. The nature of the residue in celery is adequately understood for the purposes of this proposed Section 18. The residues of concern in celery are iprodione, 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.

2. Adequate analytical methods are available for enforcement in PAM II and PP#7E3554.

3. Residues on celery resulting from the proposed use would be less than 40 ppm. Residue data reflecting the proposed use would be needed for a more exact determination.

4. There are no feed items connected with this use on celery. Therefore, no secondary residues are expected in meat, milk, poultry and eggs as a result of this use.

5. Analytical Reference Standards for iprodione are available from the Pesticides and Industrial Chemicals Repository, RTP, NC.

6. Data used to estimate residues resulting from the proposed use were not generated by Craven Labs.

Recommendation

TOX considerations permitting, CBTS has no objection to this Section 18 specific exemption for use of iprodione on celery. Arrangements should be made with FDA concerning the legal status of the treated commodity in commerce.

cc: RF, Circu.(7), Iprodione SF, N.Dodd(CBTS), E. Haeberer (CBTS), Section 18 File, E. Saito (SACB), C. Furlow (PIB/FOD), DRES

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