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

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

AUG 7 1991

MEMORANDUM

SUBJECT: GA 910002. Section 24(c) for the Post-Harvest use of DCNA and Iprodione on Peaches.

[No MRID No. DEB No. 8180 DP BARCODE: D165496]

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The Georgia Department of Agriculture requests a Sec. 24(c) special local need registration for the Atochem N. A. Inc, Agrichemicals

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Division product DECCO SALT NO. 35. The active ingredients in DECCO SALT NO. 35 are Iprodione (3-(3,5-dichlorphenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide), EPA Reg. # 359-685, and Dicloran (DCNA) (2,6(dichloro)-4-nitroaniline), EPA Reg. # 45639-110. Both active ingredients are registered for pre- and post-harvest use on peaches. Iprodione is also known as Rovral^{R}. DCNA is also known as Botran^{R}. DECCO SALT NO. 35 is to be used to control Monilinia rot and Rhizopus rot in peaches.

Tolerances are established in 40 CFR 180.399 at 20 ppm for residues of Iprodione, its isomer (3-(1-methylethyl)-N-3,5-dichlorophenyl) 2,4-dioxo-1-imidazolidincarboxamide) and its metabolite (3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide) in peaches for pre- and post-harvest applications (Phase IV review, 3/91). Iprodione is a List B chemical. Tolerances are established in 40 CFR 180.200 at 20 ppm for residues DCNA in peaches for pre- and post-harvest applications (Residue Chemistry Chptr., Registration Standard, 8/83. A Reg. Std. update is currently in progress.). DCNA is a List A chemical. According to the registrant, Sec. 24(c) registrations were previously issued for the use of each fungicide on stonefruit, in the states of Washington and South Carolina.

The proposed use is for the application of a dilute solution of a mixture of DECCO SALT NO. 35 and a stonefruit coating (PNPL-251) on harvested peaches. A washer/waxer machine equipped with an air nozzle spray system is used to treat fruit, at a rate of 1 gal./hr. Prior to treatment, the fruit is washed with a 1:20 dilution of Fruit and Vegetable Kleen 241. The DECCO SALT NO. 35-stonefruit coating mixture is prepared by the addition of 3 lbs. DECCO SALT to 100 gal(s) PNPL-251 coating with continuous mixing until the suspension is sprayed on the fruit. This dosage is equivalent to 0.01 lb. ai/gal of Iprodione and 0.0075 lb. ai/gal of DCNA. DECCO SALT NO. 35 consists of 33.33% Iprodione, 24.99% DCNA and 41.68% inerts.

The metabolism of DCNA in stonefruit is adequately understood for the purposes of this Sec. 24(c). The residue of concern in/on peaches is the parent compound, 2,6(dichloro)-4-nitroaniline (Residue Chemistry Chptr. Reg. Standard, August 1983).

The metabolism of Iprodione in stonefruit is adequately understood for the purposes of this Sec. 24(c). The residues of concern in peaches are the combined residues of Iprodione, its isomer (3-(1-methylethyl)-N-3,5-dichlorophenyl)2,4-dioxo-1-imidazolidincarboxamide) and its metabolite (3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide) (Phase IV review completed 3/91).

The analytical method used to determine residues of DCNA, as well as combined residues of Iprodione and its regulated derivatives, is the same validated method which was used to establish tolerances for DCNA and Iprodione (Analytical Method #419-A). Data were submitted with this Sec. 24(c) which indicate the method has a 100% recovery for both DCNA and Iprodione when peach samples were spiked with 1.24 ppm and 1.46 ppm. respectively.

In the data submitted with this Sec. 24(c) registration from a study conducted in California, peaches were washed with Fruit and Vegetable Kleen 241 diluted 1:20 with water, then sprayed with a mixture of 3 lbs. DECO SALT NO. 35 and 25 gals. of undiluted PNPL-251 coating to produce a mixture which contained 0.048 lb. ai/gal.Iprodione and 0.036 lb. ai/gal DCNA. The DECCO SALT-PNPL mixture was applied to peaches at three rates: 0.24 gal/hr on 33,000 lbs. fruit; 0.50 gal/hr for 17,000 lbs. fruit and 1 gal/hr for 12,000 lbs. fruit. The length of time for spray applications at each rate was not provided. It is presumed that the time of application was the same for each of the three spray rates and further that it simulates typical use conditions in the field. The residue findings in the study were 0.98 to 1.108 ppm for DCNA residues and 1.67 to 1.89 ppm for combined Iprodione residues on peaches. The reported residues resulting from the proposed use will be covered by the existing tolerances.

Meat, Milk, Poultry and Eggs

The RAC peaches is not a livestock feed item. No residues of DCNA or Iprodione are expected to occur in meat, milk, poultry or eggs from this Sec. 24(c) proposed use.

CONCLUSIONS AND RECOMMENDATION

1. The metabolism of DCNA is adequately understood for the purposes of this Sec. 24(c). The residue of concern is (DCNA) (2,6(dichloro)-4-nitroaniline).

2. The metabolism of Iprodione is adequately understood for the purposes of this Sec. 24(c). The residues of concern are Iprodione, its isomer (3-(1-methylethyl)-N-3,5-dichlorophenyl) 2,4-dioxo-1-imidazolidincarboxamide) and its metabolite (3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide).

3. Adequate analytical methodology is available for the determination of DCNA and Iprodione related residues in peaches (Analytical Method #419-A).

4. Residues of DCNA and Iprodione from the proposed use of DECCO SALT NO. 35 are not expected to exceed: 2 ppm for DCNA and 2 ppm for combined Iprodione related residues. Therefore, residues will be covered by the existing tolerances.

5. Analytical reference standards are available from the Industrial Chemicals Repository, RTP, NC.

6. Data referenced in this review were not generated by Craven Laboratories.

Established tolerances for residues from the use of DECCO SALT NO. 35 (DCNA and Iprodione) on peaches will not be exceeded by the proposed use in this Sec. 24(c). TOX considerations permitting, CBRS has no objection to this Sec. 24(c) SLN registration.

CC: R.F., **IPRODIONE and DCNA/BOTRAN** S.F., Circu, AIKENS, Sec.24(c)
DRES/SACB, PIB/FOD (C. Furlow)
RDI:SH for FS:8/6/91:DFE for EZ:8/6/91
H7509C:CBII:AMA:aa:CM#2: Rm 800A:557-7379:8/5/91