

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAY 31 1991

MEMORANDUM

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

SUBJECT:

Section 18 Crisis Exemption. 91-NC-08. Iprodione on

Tobacco. No MRID #. DEB # 8903.

FROM:

Leung Cheng, Chemist

Special Review Section II

Chemistry Branch II - Reregistration Support

Health Effects Division (H7509C)

THROUGH:

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TO:

Susan Stanton, PM # 41

Emergency Response/Registration Support Branch

Registration Division (H7505C)

and

Toxicology Branch

Health Effects Division (H7509C)

The State of North Carolina, Department of Agriculture, has submitted an amendment to its previous Section 18 emergency request for the use of iprodione on tobacco (91-NC-02, L. Cheng, 4/24/91). CBRS raised no objection to the 91-NC-02 request provided a 60-day pre-harvest interval would be imposed on the proposed label. North Carolina issued a crisis exemption on April 25, 1991.

The previous NC-91-02 proposed label would permit foliar applications at 0.5-1.0 lb ai/A/treatment to tobacco transplants in commercial plantbeds and greenhouses. Applications should be repeated if conditions are favorable for disease development. Up to 3 lbs ai/A may be applied. A pre-harvest interval was not specified.

The current NC-91-08 label would permit 0.5-1.0 lb ai/3,000-3,500 sq. ft./treatment for greenhouse transplants and 0.5-1.0 lb ai/3,000-3,500 sq. yd./treatment for plantbed transplants. acre is equivalent to 4840 sq. yd. or 43,560 sq. ft.]. Application should be repeated 7-14 days later if conditions are ravorable for disease development. A pre-harvest interval has not been

specified.

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 ranging from 0.1 to 60 ppm, and 90 to 150 ppm in forage and hay. Tolerances on meat, milk, poultry and eggs are established at 0.5-3.0 ppm [40 CFR 180.399].

A Registration Standard has not been completed for iprodione. Use on tobacco is not permitted on the current labels.

For the purpose of this Section 18, the residues of concern on tobacco are iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (RP30228), and carboxamide (RP32490).

In a telephone conversation (919-737-2828, 5/30/91) with Dr. Thomas A. Melton, an extension specialist on tobacco in Raleigh, NC, he indicated that iprodione would not be used after transplanting of tobacco from greenhouses or plantbeds, and that only one repeat treatment would be made in the greenhouses or on plantbeds. The majority of iprodione use would be on greenhouse site.

He further explained that by the time of tobacco topping (7-8 weeks after transplanting; tobacco plants at 3-4 ft in height; ca 2-4 weeks before first harvest), most of the lower treated leaves would have fallen off. Only 25% of the first harvest or 5% of the total leaves harvested from any treated plants would have been in contact with this fungicide.

In response to a question concerning the size of tobacco leaves, Dr. Melton said mature leaves measured 2 ft. long by 10-12 in. wide and transplant leaves measured around 3 in. by 2 in. CBRS estimates a growth dilution of roughly 40x assuming constant leaf density. Dr. Melton did not have information on the weight of tobacco leaves.

While the amended use rate would translate to a 12x rate increase over the previous request (or 8x assuming a total of 2 treatments prior to transplanting), this would be outweighed by the percent of treated leaves harvested and growth dilution.

No residue data were submitted for tobacco in the current or the previous Section 18 submission. CBRS previously estimated total iprodione residues on tobacco (green and cured/dried) were not likely to exceed 0.1 ppm based on the leaf lettuce residue data which were not generated by Craven Labs, and provided a pre-harvest interval of 60 days were imposed (91-NC-02, 4/24/91, L. Cheng).

CBRS estimates total iprodione residues are not likely to exceed 0.1 ppm on green and cured/dried tobacco provided a pre-harvest interval of 60 days is imposed on the 91-NC-08 label.

There are no feed items associated with tobacco. Therefore, there will be no problem with secondary residues in meat, milk, poultry and eggs.

CONCLUSIONS AND RECOMMENDATION

- 1. For the purpose of this Section 18, the residues of concern on tobacco are iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidine-carboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide (RP32490).
- 2. Method I as described in PAM II may be used for enforcement.
- 3. Provided a 60-day PHI is imposed on the label, combined residues of iprodione, its isomer 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidine-carboxamide (RP30228), and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide (RP32490) on green and cured tobacco are not likely to exceed 0.1 ppm.
- 4. There will be no problems with transfer of residues to meat, milk, poultry and eggs from this proposed use.
- 5. Analytical reference standards are available at the Pesticides and Industrial Chemicals Repository, RTP, NC.
- 6. Residue data used to estimate iprodione residues in/on green and cured tobacco were not produced by Craven Labs.

TOX considerations permitting and provided a 60-day PHI is imposed, CBRS has no objection to this Section 18 request. An agreement should be made with the FDA in regard to treated commodities in commerce.

cc:Circ, RF, Section 18 F, Cheng, Saito, PIB/FOD RDI:FSuhre:5/30/91:EZager:5/30/91 H7509C:CBII-RS:LCheng:CM#2:RM810:5/30/91:02: