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

APR 19 1991

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: 91-OR-14. Section 18 Emergency Exemption. Tilt[R] on Peppermint. No MRID #. DEB # 7856. DP Barcode 163378.

FROM: Leung Cheng, PhD, Chemist
Special Review Section II
Chemistry Branch II - Reregistration Support
Health Effects Division (H7509C)

THROUGH: Francis B. Suhre, Section Head
Chemistry Branch II - Reregistration Support
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TO: J. Tompkins/B. Cool, PM # 41
Emergency Response Registration Support Branch
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and

Toxicology Branch
Health Effects Division (H7509C)

The Oregon Department of Agriculture has requested a specific exemption for the use of propiconazole (TILT[R]) fungicide on peppermint to control peppermint rust in Western Oregon. The active ingredient is 1-((2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl)methyl)-1H-1,2,4-triazole.

Tolerances are established for the residues of propiconazole and its metabolites determined as 2,4-dichlorobenzoic acid and expressed as parent compound, in or on various agricultural commodities including wheat grain at 0.1 ppm, wheat straw at 1.5 ppm, and meat, milk, poultry and eggs at 0.05 to 0.2 ppm [40 CFR 180.434; tolerances on liver and kidney are to expire 6/91].

The proposed use would permit foliar sprays at a rate of 4 fl oz product (51 grams ai) per acre when the mint is ca 4 inches high. A repeat application is permitted 2 weeks later; however, no more than 2 treatments are allowed per season. A pre-harvest interval of 90 days is imposed. Feeding of fresh or extracted mint hay to livestock is prohibited.

A Registration Standard for propiconazole has not been published. Propiconazole is a list C chemical.

For the purpose of this Section 18 request, the residues to be regulated comprise of propiconazole and its metabolites determined as 2,4-dichlorobenzoic acid (and expressed as parent compound).

Residue data generated in the state of Oregon were enclosed. Following applications of 51 or 102 grams of propiconazole and a PHI of 90 days, total residues ranged from <0.05 to 0.13 ppm on fresh hay, and from <0.05 to 0.08 ppm in mint oil. There appears to be no concentration of residues on processing to mint oil. The method that was used to measure propiconazole residues at the Ciba-Geigy labs was AG-454A, which was successfully tested in an EPA lab (PP#4F3074, S. Malak, 5/28/87). Recoveries in mint hay and oil ranged from 50 to 93% when fortified at 0.05 and 0.2 ppm parent. CBRS estimates propiconazole residues will not exceed 0.3 ppm in fresh hay and not exceed 0.2 ppm in mint oil as a result of the proposed use.

With the proposed feeding restriction of spent hay, CBRS has no concern with the transfer of secondary residues to meat, milk, poultry and eggs.

CONCLUSIONS AND RECOMMENDATION

1. For the purpose of this Section 18 request, the residues to be regulated comprise of propiconazole and its metabolites determined as 2,4-dichlorobenzoic acid (and expressed as parent compound).

2 CBRS estimates propiconazole residues will not exceed 0.3 ppm in fresh hay and not exceed 0.2 ppm in mint oil as a result of the proposed use.

3. Method AG-454A as described in PP#4F3074 is adequate for enforcement. It is a capillary GC/EC method.

4. CBRS has no concern with the transfer of secondary residues to meat, milk, poultry and eggs.

5. Residue data used to estimate propiconazole residues in mint hay and mint oil were not generated by Craven labs.

TOX considerations permitting, CBRS has no objection to the proposed 18 specific exemption. An agreement should be made with the FDA in regard to the treated commodities in commerce.

cc:Circ, RF, Propiconazole Section 18 F, Cheng, DRES, PIB/FOD
RDI:FSuhre:4/16/91:EZager:4/16/91
H7509C:CBII-RS:LCheng:CM#2:RM810:4/15/91:02: