4-13-82

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

APR 13 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: 82-OH-01. Section 18 exemption for the use of Bayleton on wheat.

FROM: Richard Loranger, Chemist R. Loranger
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Charles L. Trichilo, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Emergency Response Section
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

The Ohio Department of Agriculture requests a Section 18 exemption for the use of Bayleton (triadimefon) to control powdery mildew on wheat. Treatment of 50,000 acres is proposed.

In our review of PP#1G2432 (memo of John M. Worthington, 3/29/80), we recommended for the proposed temporary tolerance for residues of Bayleton [1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4 triazol-1-yl)-2-butanone] and its metabolite, β-(4-chlorophenoxy)-α-(1,1-dimethylethyl)-1H-1,2,4-triazol-1-ethanol (KWG 0519) in or on wheat grain at 0.1 ppm. The use pattern for the experimental program, which involved two applications of 1-4 oz act/A and a 60 day PHI, is different than that proposed in the current submission.

Temporary tolerances for residues of Bayleton and its metabolite KWG 0519 have been established at 0.01 ppm in milk, eggs and the meat, fat and meat byproducts of cattle, goats, hogs, horses, poultry and sheep. These will expire on Dec. 31, 1982.

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The proposed use is application of 2-3 oz ai/A in a minimum of 5 gallons of water. Bayleton 50% WP is not to be applied within 21 days of harvest. We recently raised no objections to similar application rates requested by Maryland and Delware with 30 day PHI's (E. Zager, 1/18/82).

The metabolism of Bayleton in small grains and animals was discussed in the review of PP#1G2432 (memo of J. Worthington, 2/25/81). For the purpose of these Section 18 uses we consider the residue of concern in wheat and animal tissues to be Bayleton and its metabolite KWG 0519.

Only one residue study in PP#1G2432 reflected a PHI as short as 21 days (or less). Two applications of 4 oz ai Bayeton/A (1.33X) 13 days before harvest procuded combined residues of parent plus the KWG 0519 metaboltie of 0.09 ppm in wheat grain. The remaining trials, although having longer PHI's (44-76 days), are useful as they involved two applications of 4-6 oz ai/A (versus one application of 2-3 oz ai/A requested). Total residues were <0.02-0.07 ppm in grain.

Based on the above data we estimate that residues of Bayleton and its metabolite KWG 0519 will not exceed 0.1 ppm in or on wheat grain as a result of the proposed uses.

No residue data are available for wheat forage, fodder and straw.

Meat, Milk, Poultry and Eggs

Feeding studies were discussed in our review of FAP#1H5282 and at that time we concluded that the apple and grape uses would fall under Category 2 of 180.6(a). Thus, in conjunction with those uses which would result in a dietary burden of approximately 2 ppm, we recommended for the establishment of a temporary 0.01 ppm tolerance for residues in milk, eggs and the meat, fat and meat byproducts of cattle, goats, hogs, horses, poultry and sheep.

Provided a restriction against the feeding of treated wheat forage, fodder and straw is added to the Section 18 label the use proposed here will not contribute significantly to the existing dietary burden. Therefore, it is our judgement that the above meat, milk, poultry and egg tolerances will be adequate to cover any secondary residues resulting from the use proposed here.

Conclusions

1. Residues of Bayleton and its metabolite KWG 0519 will not exceed 0.1 ppm in or on wheat grain as a result of the proposed use.

2. Provided a restriction against the feeding of treated wheat forage, fodder and straw to livestock is added to the Section 18 label, secondary residues of Bayleton and KWG-0519 in milk, eggs and the meat, fat and meat byproducts of cattle, hogs, horses, poultry and sheep will not exceed the established 0.01 ppm temporary tolerance.

Recommendation

TOX considerations permitting and provided a restriction against the feeding of treated wheat forage, fodder and straw to livestock is added to the Section 18 label, we have no objections to the proposed Section 18 exemption. An agreement should be made with FDA regarding the legal status of treated wheat in commerce.

cc: Bayleton S.F.
Section 18 S.F.
R.F.
Circu
Reviewer
TOX

RDI:Section Head:RJH:Date: 4/13/82:RDS:Date:4/13/82
TS-769:Reviewer:R.Loranger:LDT:X77324:CM#2:RM:810:Date:4/13/82