11-19-82

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

MEMORANDUM

NOV 19 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: 83-CA-06. Proposed Section 18 exemption for the use of Bayleton on fresh market tomatoes in California

FROM: Edward Zager, Chemist
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 California Department of Food and Agriculture requests a Section 18 exemption for the use of Bayleton 50% Wettable Powder Fungicide to control powdery mildew on fresh market tomatoes. It is estimated that approximately 30,000 acres of tomatoes will be treated under this exemption.

PP#0E2393 proposing a tolerance of 0.2 ppm for residues of 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-trizol-1-yl)-2-butanone and its metabolite beta-(4-chlorophenoxy)-alpha-(1,1-dimethylethyl) -1H-1,2,4-triazol-1-ethanol in or on tomatoes (whole, fresh) is currently in reject status due to inadequate residue data and questions relating to the use of tomato by-products as feed items.

The proposed use calls for a up to 8 ground applications at 10-21 day intervals at the rate of 1-2.5 oz act/A in a minimum of 20 gals of water/A with a 1 day PHI. Applications will be made to tomatoes untented for fresh market only. This restriction is considered practical for this limited emergency use since according to Rick Melnicoe of the California Department of Food and Agriculture (telecon with Jack Housenger, ERS 11/16/82):

1/3
216

1). A permit will be issued by the Agricultural Commissioner which will specify that only fresh market tomatoes may be treated.

2). Fresh market tomato varieties are different from canning tomato varieties and are not appropriate for canning purposes.

3). It is unlikely that a fresh market tomato grower would be able to sell his treated crop to canning companies which contract well in advance with tomato growers.

The metabolism of Bayleton in plants was discussed in our review of PP#0E2393 (A. Smith, 10/8/82). The residue of concern in tomatoes is the parent compound and its metabolite KWG 0519 (free and conjugated).

Residue data submitted with this request and already reviewed in connection with PP#0E2393 reflect 4 studies from Mexico and one study from Texas. Samples were analyzed for residues of the parent compound Bayleton and its metabolite KWG0519. Some samples were also analyzed for residues of the metabolite KWG1342.

The crops grown in Mexico received 8 applications at the rate of 2.5 oz act/A (1X the maximum proposed rate). Residues in tomatoes ranged from 0.02-0.15 ppm at PHI's of 0-15 days. However, in the Texas study in which tomatoes received 10 applications of 2.5 oz act/A residues in or on tomatoes ranged up to 1.65 ppm on the day of the last application.

In view of this wide variation in residue levels we estimate that residues of Bayleton and its metabolite KWG0519 will not exceed 2 ppm in or on tomatoes as a result of the proposed use.

Meat, Milk, Poultry and Eggs

Since the use is limited to fresh market tomatoes only there are no feed items involved. Consequently, there will be no problem with secondary residues of Bayleton in meat, milk, poultry and eggs from this use.

Conclusions

1. Residues of Bayleton and its metabolite KWG0519 will not exceed 2 ppm in or on tomatoes as a result of the proposed use.

2. Since the use is limited to fresh market tomatoes, there are no feed items involved in this use. Consequently, there will be no problem with secondary residues in meat, milk, poultry and eggs from this use.

Recommendation

TOX considerations permitting, we have no objections to the issuance of this Section 18 exemption.

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

RDI:Section Head:RJH:Date:11/17/82:RDS:Date:11/17/82
TS-769:RCB:Reviewer:E.Zager:LDT:X77324:CM#2:RM:810:Date:11/19/82