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

AUG 30 1984

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No. 50534-8. Amended registration for Chlorothalonil on stone fruits, peanuts and tomatoes.

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

THRU: Charles L. Trichilo, Ph.D., Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769) R. Schmitt for

TO: Henry Jacoby, PM-21
Fungicide-Herbicide Branch
Registration Division (TS-769)

SDS Biotech Corporation has requested an amended registration for the fungicide chlorothanlonil (Bravo; tetrachloroisophthalonitrile) to allow aerial applications to stone fruit. Some minor changes are also being requested under the peanut and tomato directions. A letter from SDS dated 4/23/84 is included which responds to three deficiencies noted in a 3/27/84 letter from H. Jacoby. The product of interest is BRAVO 500 containing 40.4% ai or 4.17 lb ai/gallon.

Stone Fruit

Application rates (lb/A, lb/100 gal. spray) and timings (fall-winter up through shuck-split) will remain the same. The major change desired here is replacement of the statement "Application through ground equipment is recommended" by "Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, BRAVO 500 may be applied with aircraft using at least 20 gallons per acre". In the spray volume table on the label the minimum volumes for concentrate sprays are reduced from 65 to 20 gallons for sweet cherries and from 50 to 20 gallons for the other stone fruit. SDS was informed in the 3/27/84 letter that the addition of aerial application and low volume spraying requires data to show that residues will not exceed established tolerances.

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In response the registrant states that such data are not justified in this case since applications are made prior to fruit formation resulting in long preharvest intervals. SDS mentions a recently completed peach trial in which early-season aerial treatments resulted in <0.01 ppm chlorothalonil and no detectable hydroxy metabolite (DS-3701). Further details of this trial are not presented.

We concur with the registrant that residue data should not be required reflecting aerial applications during dormant periods and up through shuck split. Fruit are not yet formed at this point and any difference in residue deposits would be eliminated by the long PHI.. Therefore, the established stone fruit tolerances of 0.2-0.5 ppm will not be exceeded by the aerial use. It also appears that the restriction "DO NOT allow livestock to graze in treated areas" will be added to the label through this amendment. We strongly recommend for this statement in the absence of meat and milk tolerances for this fungicide.

Peanuts

The application rate and repeat interval (10-14 days) are not changed. The current label calls for treatment to start when "disease first appears" while the amended label will state "when leaf wetness first occurs or 30 to 40 days after planting". This change will have not effect on residues as applications may still take place at 10 day intervals throughout the season and a 14 day PHI will still be observed. The 0.3 ppm tolerance for peanuts will not be exceeded.

In conjunction with the peanut use and other crops, the registrant wishes to change the wording concerning sprinkler irrigation under the "Directions for Use" section. The label currently states "Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop". The proposed label reads "Application through sprinkler irrigation systems is recommended for some crops which are specified on the label below". The 3/27/84 letter instructs the registrant to rewrite the statement to include the specific crops. SDS responds by stating that this language was previously approved for BRAVO 500 on soybeans but due to an oversight was left off the label. They feel the proposed statement is preferable to listing all the crops since individual crop recommendations clearly identify when sprinkler irrigation is acceptable. RCB feels that the proposed labeling is adequate in regard to which crops are to receive sprinkler irrigation with chlorothalonil. However, we also do not feel that RD's request for a list of specific crops under "Directions for Use" is unreasonable.

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Tomatoes

Comparing the specimen label provided by SDS with the proposed amended one it appears that sprinkler irrigation will be added for tomatoes. We have no objections to this use as previously we concluded that the established tomato tolerance (5 ppm) would not be exceeded (R. Loranger, 1/5/82, Reg. No. 677-313).

Other minor changes in this amendment for tomatoes include grouping the diseases under "FOLIAGE" and "FRUIT" and slight reduction in the maximum rate (4.25 to 4.0 pts/acre). We have no objections to these alterations.

The final point concerns tank mixing with copper products. The EPA letter instructs SDS to name specific products or state "EPA registered pesticide products that claim copper as the active ingredient and are labeled for control of bacterial diseases of tomatoes". The registrant does not see the need for such language. We concur with RD that specific product names or "EPA registered products" should appear on the label.

Conclusions

1. We concur with the registrant that residue data are not required reflecting aerial applications during dormant periods and early in the season for stone fruit. The established stone fruit tolerances will not be exceeded by such use.

2. The proposed label is adequate in regard to which crops are to receive sprinkler irrigation applications of chlorothalonil. However, we also feel that RD's request for a list of specific crops under "Directions for Use" is not unreasonable.

3. The label changes requested for peanuts and tomatoes will not result in residues exceeding the established tolerances.

4. We concur with RD that specific product names or a statement instructing use of "EPA registered products" should appear on the label in conjunction with the tank mixing with copper for use on tomatoes (deficiency 3 in 3/27/84 letter).

Recommendation

We have no objections to the amended registration provided the registrant revises the copper tank mixing section of the label as specified in deficiency 3 of the 3/27/84 letter.

cc: R.F., Circu, Loranger, S.F.:Chlorothalonil: Amended use File.
RDI: A.R.: 8/22/84: RDS:8/22/84
TS-769:RCB: R.L.:bj: RM:810: CM#2 X-382-7145: 8/22/84

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