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

PM 52 HSB

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: MS-900001; 24(c) Chlorothalonil (Bravo® 720) for use on Peaches. EPA Reg. No. 50534-188. (No MRID #, DEB No. 6249).

FROM: Freshteh Toghrol Ph.D., Chemist
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THRU: Francis B. Suhre, Section Head
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TO: Susan Lewis/James Stone, PM - 21
Herbicide/Fungicide Branch
Registration Division (H-7505C)

The Mississippi Department of Agriculture, has issued a Section 24(c) registration for the use of Bravo® 720 to control scab in or on peaches.

Bravo® 720 (EPA Reg. No. 50534-188) is a registered pesticide of Fermenta Plant Protection Company ; the formulation contains 54% (6 lbs ai/gallon) chlorothalonil (2,4,5,6-tetrachloro-isophthalonitril) as its active ingredient.

Tolerances are established (40 CFR 180.275) for chlorothalonil (2,4,5,6-tetrachloroisophthalonitril) and its metabolite 4-hydroxychlorothalonil (4-hydroxy-2,5,6-tri-chloroisophthalonitrile) in or on several raw agricultural commodities ranging from 0.05 ppm to 15.0 ppm.

A permanent tolerance for chlorothalonil and its 4-OH metabolite in or on peaches have been established at 0.5 ppm.

A Registration Standard and FRSTR have been issued for chlorothalonil. The Residue Chemistry Chapter to the Registration Standard is dated 3/30/84, the FRSTR is dated 3/11/88 and the draft Guidance Document is dated 9/88.

According to the chlorothalonil FRSTR (page 2 dated 2/19/88), the metabolism of chlorothalonil in plants remains inadequately understood, because unidentified water-soluble metabolites present in plants following exposure to chlorothalonil-treated soil have not been characterized, and because data are needed pertaining to the nature of chlorothalonil residue in mature plants following foliar application. In addition, data are required to determine whether the impurities in technical chlorothalonil need to be included in the tolerance expression. However, since no detectable levels of HCB or PCBN were detected in or on peaches following registered use, no additional data are required for peaches (FRSTR, page 72, dated 2/19/88).

Registered Section 3 Use on Peaches:

Apply 3-1/8 to 4-1/8 pts of Bravo 720 (2.3 to 3.1 lbs ai)/300 gallons/A of peaches. Make one application at popcorn (pink, red, or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall. In addition make one more application at shuck-split. Do not apply Bravo 720 after shuck-split and before harvest. If additional disease control is needed before harvest, use another registered fungicide. Apply Bravo® 720 in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application through ground equipment is recommended. If applications with ground equipment is not feasible, Bravo 720 may be applied with aircraft using at least 20 gallons per acre. Do not allow livestock to graze in treated areas (orchard crops).

24(c) Use:

According to this 24 (c) label 8 pts of Bravo 720 (6 lb ai)/A are applied at shuck-split on peaches. This rate is twice as much as the registered use at shuck-split. Do not combine Bravo 720 in the spray tank with other pesticides, surfactant or fertilizers, unless your prior use has shown the combination

physically compatible, effective and non-injurious under your conditions of use. Do not combine Bravo 720 with Dipel 4L, Triton AG-98 or Triton B-1956, as phytotoxicity or reduced effectiveness in disease control may result. Do not allow livestock to graze in treated areas. Do not apply this product through any type of irrigation equipment. It is important to read and observe the precautionary statements and all other information appearing on the Bravo 720 label.

No residue data were submitted with this Section 24(c). However, there are sufficient data in DEB's files to evaluate this SLN 24(c) registration (MS900001). Residue data previously submitted in connection with petition PP#3F2815 are summarized below:

<u>Location</u>	<u>#applications</u>	<u>ai/A/</u>	<u>PHI</u> <u>days</u>	<u>PPM</u> <u>Chlorothalonil,</u> <u>HCN,PCBN and 4-OH</u>
LA	8	3.1	65	0.09
	7	3.1	76	0.02
	6	3.1	97	0.07
GA	9	3.1	74	0.75
	8	3.1	89	0.22
VA	7	3.1	73	1.04
PA	4	3.1	85	0.27
OR	7	3.1	74	0.55
	6	3.1	85	0.41
	5	3.1	102	0.14

The PHI for peaches from shuck-split to harvest ranges from 70 to 90 days. Total lb ai/A/season will be 15.3 (ca.).

Based on these data, we conclude that the residues of chlorothalonil/metabolite will not exceed the established tolerance at 0.5 ppm in or on peaches as a result of this 24(c) use (15.3 lb ai/A/season, PHI 70-90 days).

Conclusion

1. For the purpose of this 24(c) Registration of Bravo 720 on peaches, the residues to regulate are chlorothalonil and its 4-OH-metabolite (40 CFR 180.275).

2. Residue data for chlorothalonil/metabolite submitted in connection with PP#3F2815 indicate that the established tolerance at 0.5 ppm in or on peaches will not be exceeded by this 24(c) registration.

3. An analytical method is available for enforcement purposes in PAM II (method I) for residues of chlorothalonil and its 4-OH metabolite. Analytical Reference Standards are available from the pesticide and Industrial Chemicals Repository at Industrial Park, NC.

Recommendation:

DEB has no objection to this 24 (c) Registration (MS-90001) for chlorothalonil/metabolite in or on peaches, since there are sufficient data to support this SLN label.

Note to PM:

MS-90001 is the Registration No. Assigned to the 24(c) label, while on the Data Review Record under "2. Identifying Number" MS-90002 is used. This discrepancy should be resolved.

cc: Chlorothalonil S.F., R.F., Section 24(c), Registration Standard file, Circ., R. Schmitt, Branch Chief, F. Toghrol, PMSD/ISB.
RDI: S.Hummel (2/7/90): F. Suhre (2/20/90): E. Zager: Deputy Chief (2/21/90).
TS-H7509C:DEB:F.Toghrol:F.T.:RM:802:CM#2:557-7887:2/21/90.