

US EPA ARCHIVE DOCUMENT



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

JAN 30 1992

MEMORANDUM

SUBJECT: 92OR0004; Section 18 Specific Exemption.
Chlorothalonil (Bravo 720, EPA Reg.No.50534-188) in or on hazelnuts.

MRID No. None
CBTS No. 9273
HED# 2-1157
DP Barcode# D173585

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The Oregon Department of Agriculture has requested a Section 18 specific exemption for the use of the fungicide, Bravo 720. The active ingredient is chlorothalonil. The request is to use ISK Biotech Bravo 720, EPA registration No. 50534-188. Bravo 720 contains 54% chlorothalonil by weight (6 lbs ai/gal). The Oregon Department of Agriculture has stated that ISK Biotech is aware of this request for Bravo 720 on hazelnuts (filberts) and will be

responsible for providing product bulletins for this use if approved. A similar Section 18 request was approved by CBRS (W. Anthony, 1/8/91, 90-OR-05).

Oregon has 28,460 acres of hazelnuts. It is anticipated that a maximum of 11,000 acres would be treated which would require 16,500 gallons of product (99,000 lbs ai) per season if treated at the maximum rate (9 lbs ai/A). The requested exemption is identical to that previously approved and is to be used from leaf bud break (March 1, 1992) through early shoot elongation (May 30, 1992).

Tolerances are established for the residues of chlorothalonil (2,4,5,6-tetrachloroisophthalonitrile, DS-2787) and its 4-OH metabolite (4-hydroxy-2,4,5,6-trichloroisophthalonitrile, SDS-3701) in/on raw agricultural commodities with values ranging from 0.05 ppm in/on cocoa beans to 15 ppm in/on celery under 40 CFR 180.275. There are no existing permanent or temporary tolerances for chlorothalonil on hazelnuts.

CBTS has recommended for the establishment of permanent tolerances @ 0.02 ppm in/on pecans (J. Stokes, PP#7F3471, 5/30/90).

DETAILED CONSIDERATIONS

PROPOSED USE

One formulation is proposed for use: Bravo 720 containing 54% chlorothalonil with the remainder inert ingredients. The proposed use on hazelnuts involves a maximum of three applications and a PHI of 120 days. No applications will be made after May 30, 1992. Nut shell waste may not be fed to livestock.

Apply 4 pts of Bravo 720 per acre for ground application. Apply in sufficient water to thoroughly wet tree canopy. A mature orchard may need as much as 400 gallons of water per acre. Start applications at leaf bud break and continue at 2 to 4 week intervals. Application by ground is preferred because better coverage is obtained. If application by ground is not feasible, Bravo 720 may be applied by aircraft at a rate of 4 pts per acre using at least 20 gallons of water per acre.

The requested use pattern is identical to that approved previously by CBRS (W. Anthony, 1/8/91, 90-OR-05).

NATURE OF THE RESIDUE

The nature of the residue and the plant metabolism of chlorothalonil in/on pecans have been previously reviewed and found to be adequate (PP7F3471, J. Stokes, 8/13/87, 5,30/90). CBTS considers that the data available are adequate to be translated for the purpose of this

Section 18 only and that the residue of concern is chlorothalonil and its 4-OH metabolite.

ANALYTICAL METHOD

Method I in the Pesticide Analytical Manual, Vol. II may be used for enforcement purposes. Recoveries for the reported residue data range from 78-115 % with an average of 91% for parent, from 62-85% with an average of 67% for the 4-OH metabolite (SDS-3701), from 60.7-93.3% with an average of 79% for SDS-46851, from 67.8-94% with an average of 77% for HCB and from 87-98.3% with an average of 91% for PCBN. The limits of detection reported were 0.01 for chlorothalonil, 0.01 for SDS-3701, 0.03 for SDS-46851, 0.003 for HCB and 0.005 for PCBN.

CBTS finds the analytical method and recovery data to be adequate for the purposes of this Section 18.

RESIDUE DATA

Preliminary IR-4 residue data were provided with this Section 18 request. Two field trials were conducted in Oregon in 1989-90. Samples were analyzed at 45, 120, 148, 176 and 200 days after application. No residue values above the limits of detection were reported in either the treated or control samples.

CBTS concludes that the residue levels expected from the use pattern in this proposed Section 18 will be less than the limits of detection and are not likely to exceed 0.05 ppm in/on the nutmeats of hazelnuts.

MEAT, MILK, POULTRY AND EGGS

Hazelnuts are not considered a livestock feed item, there will be no problem of secondary residues in meat, milk, poultry and eggs.

CONCLUSIONS

1. CBTS considers that the metabolism data available are adequate to be translated for the purpose of this Section 18 only and that the residue of concern is chlorothalonil and its 4-OH metabolite.
2. Method I in the Pesticide Analytical Manual, Vol. II may be used for enforcement purposes. CBTS finds the analytical method and reported recovery data to be adequate for the purposes of this Section 18.

3. CBTS concludes that the residue levels expected from the use pattern in this proposed Section 18 will be less than the limits of detection and are not likely to exceed 0.05 ppm in/on the nutmeats of hazelnuts.

4. Hazelnuts are not considered a livestock feed item, there will be no problem of secondary residues in meat, milk, poultry and eggs.

RECOMMENDATIONS

Toxicological considerations permitting, CBTS has no objections to the issuance of this Section 18 exemption. An agreement should be made with the FDA regarding the legal status of treated hazelnuts in commerce.

CC: S. Koepke (CBTS), Section 18, PIB/FOB (C. Furlow), Circulation(7), RF, SF, D. Edwards, J. Kariya(DRES).

H7509C:CBTS:Reviewer(SK):CM#2:Rm810:305-6380:Typist(SK):1/30/92.
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