

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAR 5 1985

R.F.
3-5-85

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: EPA File No 85-CA-07. Proposed §18 Specific Exemption for Use of Triadimefon (Bayleton) on Caneberries. No Accession Number. RCB No 686.

FROM: Leung Cheng, Chemist *L. Cheng*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Andrew Rathman, Section Head *ARR*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Don Stubbs/Stam Austin, PM Team #41
Emergency Response Branch
Registration Division (TS-767)

The Department of Food & Agriculture of California has requested a renewal of the specific §18 exemption for the use of triadimefon on caneberries (raspberries, blackberries, boysenberries) to alleviate existing powdery mildew problem. A total of 800 acres is to be treated. A recent petition submitted by IR-4 and the Agricultural Experiment Station of California on the same has been rejected due to lack of residue data reflecting proposed use (PP4E3088, L. Kutney, 8/1/84).

An enforcement level of 2 ppm has been recommended and established on triadimefon [1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanone] and its metabolite beta-(4-chlorophenoxy)-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol in or on caneberries (see 83-CA-59 §18 memo by R. Loranger, 5/24/83).

No changes have been made for the 1985 program from the previous one. Bayleton 50WP is to be applied by ground or air at 2 oz ai per acre at 4- to 6-week intervals. A maximum of 4 applications in one year is imposed and a 3-day PHI is to be observed. Berries with residues exceeding 2 ppm shall not be allowed into food channels.

A method for determining residues in raspberries has been described in PP3F2887. The sample is extracted with acetone and dichloromethane, cleaned up on a Florisil column and analyzed by

GC equipped with a flame detector. Reported recovery was 76% for triadimefon and 75% for its alcohol metabolite when a sample was fortified with 0.1 ppm of each. Validation data on peaches, apricots and plums showed 74-100% recovery at 0.05 and 0.1 ppm spike levels.

As mentioned earlier no residue data are available to support the proposed use. Submitted data in PP4E3088 reflect one application of 2 oz ai/A at 0-day PHI resulting in ca 0.5 ppm total residues or two applications of 3 oz ai/A at 7- or 16-day PHI giving rise to 0.1-0.3 ppm residues.

The 2 ppm enforcement level previously arrived at was based on grape residue data submitted in PP's 0G2300 and 1F2474. For samples which received 2-3 applications of 3 oz ai/A maximum total residues on grapes at 0-1 day and 6-7 days were 1.55 ppm and 1.4 ppm, respectively. Since caneberries and grapes fall under the same crop grouping scheme (small fruits and berries), a 2 ppm tolerance level was thus concluded.

We expect no transfer of triadimefon residues into meat, milk, poultry and eggs from this emergency use as caneberries are not fed to livestock.

Conclusions and Recommendation

1. This emergency use could lead to 2 ppm triadimefon and its metabolite residues in caneberries.
2. An analytical method for enforcement is available in PP3F2887.
3. We expect no residues in meat, milk, poultry and eggs from this proposed use.

We do not object to this \$18 exemption renewal. Some agreement should be made with FDA concerning the status of treated berries in commerce.

cc: Circ, RF, \$18 SF, Cheng
 RDI: ARRathman:3/5/85:RDSchmitt:3/5/85
 TS-769:RCB:LCheng:CM#2:RM810:557-7484:3/5/85