

US EPA ARCHIVE DOCUMENT



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

JUL 2 1985

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#4E3091, (RCB #1148) (Acc. #073430) Acephate in or on Blueberries.
Amendment of 6/3/85.

FROM: W. T. Chin, Ph. D., Chemist *W. T. Chin*
Tolerance Petition Section II
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: John. H. Onley, Ph. D., Section Head *John H. Onley*
Tolerance Petition Section II
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Hoyt L. Jamerson, Minor Uses Officer
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

BACKGROUND

In a previous review of PP#4E3091 (5/14/85 memo of W. T. Chin), RCB recommended against the establishment of a tolerance for residues of the insecticide acephate (O,S-dimethyl acetylphosphoramidothioate) and its cholinesterase-inhibiting metabolite O,S-dimethyl phosphoramidothioate (methamidophos) in or on the raw agricultural commodity blueberries at 8 ppm (methamidophos no more than 0.5 ppm) because of deficiency No. 1, the need for a revised Section B.

PRESENT CONSIDERATION

The petitioner, IR-4, now submits an amendment which consists of a cover letter written by Dr. George M. Markle (6/3/85) and a revised Section B. Deficiency No. 1 mentioned above is restated below followed by the petitioner's response and RCB's comment/conclusion.

1

Deficiency No. 1

"The petitioner should submit a revised Section B to indicate a maximum of no more than four applications per season."

Petitioner's response to deficiency No. 1

The revised Section B currently submitted reads:

"Blueberries: Blueberry Maggot, Cherry Fruitworm, Cranberry Fruitworm, Aphids, Leafhoppers - Apply 1 lb per acre (0.75 lb a.i.) in 25 to 125 gals. water per acre by ground or in a minimum of 5 gals. per acre by air. Begin spray applications when eggs or insects first appear and repeat at 7 to 14 day intervals or as necessary to maintain control using no more than 4 applications per season. DO NOT APPLY WITHIN 7 DAYS OF HARVEST."

RCB's comment/conclusion on the petitioner's response to deficiency No. 1

Deficiency No. 1 has been resolved.

OTHER CONSIDERATIONS

- (1) In accordance with conclusions reached in RCB's third addendum to the Acephate Registration Standard (see the 10/5/84 memo of C. L. Trichilo), it is now recommended that all acephate tolerances be expressed in terms of only acephate per se under 40 CFR 180.108 and 21 CFR 561.20. Residues of methamidophos resulting from the metabolism of acephate are most appropriately placed under the tolerance regulations for methamidophos as a pesticide (40 CFR 180.315 and 21 CFR 561.277). The reason for this is to achieve compatibility with the MRLs of the Codex Alimentarius Commission, if only in terms of residue definition. Such a change in the residue definition would require deletion of paragraph (d)(8) of 40 CFR 180.3 which states that methamidophos residues may not exceed the higher of the two tolerances established for the use of acephate or methamidophos as a pesticide.

A statement should be added to 40 CFR 180.108 explaining that residues of the acephate metabolite methamidophos are regulated under 40 CFR 180.315, the methamidophos section. Also, 40 CFR 180.315 should be subdivided into parts (a) and (b) where (b) includes tolerances reflecting regulation of acephate formulations alone (i.e., methamidophos formulations are not registered for use on these commodities).

- (2) There are no Canadian, Mexican or Codex International residue limits established for residues of acephate in or on blueberries. Therefore, there are no compatibilities.

RECOMMENDATION

RCB recommends for the establishment of a tolerance for residues of the insecticide acephate and its cholinesterase-inhibiting metabolite, methamidophos, in or on the raw agricultural commodity blueberries at 8 ppm of which no more than 0.5 ppm is methamidophos. In accordance with conclusions reached in RCB's third addendum to the Acephate Registration Standard (see the 10/5/84 memo of C. L. Trichilo), an 8 ppm tolerance for acephate residues should be expressed under 40 CFR 180.108 and a 0.5 ppm tolerance for methamidophos should be expressed under Section (b) of 40 CFR 180.315.

cc: R.F., Circu., W.T.Chin, TOX, PP#4F3101, PMSD-ISB, EAB, EEB, FDA, Thompson (RTP)
RDI: J.H.Onley(6/27/85), R.D.Schmitt(7/1/85)
TS-769: RCB:CM#2, RM812,557-7484, W.T.Chin,wc(7/1/85)

INTERNATIONAL RESIDUE LIMIT STATUS

referred 7/1/85
5/14/85 F.T.
J.T.

CHEMICAL Acephate

PETITION NO. PP#4E3091

CCPR NO. 95

Reviewer: W. T. Chen

Codex Status

Proposed U.S. Tolerances

No Codex Proposal
Step 6 or above

Residue (if Step 9): _____

Residue: Acephate and its
metabolite, methamidophos (of which
methamidophos should not more than 0.5 ppm)

Crop(s) Limit (mg/kg)
None (on blueberries)

Crop(s) Tol. (ppm)
Blueberries 8 (of which methamidophos
< 0.5 ppm)

CANADIAN LIMIT

MEXICAN TOLERANCIA

Residue: _____

Residue: _____

Crop Limit (ppm)
None

Crop Tolerancia (ppm)
None (on blueberries)

NOTES: