358

AUG 25 1983

RESIDUE CHEMISTRY BRANCH, HED
PETITION REVIEW QUICK FORM

FROM:
Jesse E. Mayes, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU:
Charles Trichilo, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO:
Hoyt Jamerson, PM 43
Registration Division (TS-767)
and
Toxicology Branch
Hazard Evaluation Division (TS-769)

1. Petitioner: IR-4 and Ag. Exp. Sta. of Idaho

2. Petition No(s).: 3E2890

3. Chemical(s): dimethoate

4. Tolerance Proposal (RAC's & Levels): 2 ppm in or on lentils.

5. Tolerance Expression: dimethoate (O,O-dimethyl S-(N-methylcarbamoylmethyl) phosphorodithioate) incl. its oxygen analog (O,O-dimethyl S-(N-methyl-N-formylmethyl) phosphorothioate)

6. Established Tolerances: 40 CFR 180.204 various RAC's incl. fruits, meat milk and vegetables ranging from 0.002 ppm - 2 ppm.

7. Letter(s) of Authorization (if applicable): letter dated 5/3/83 from W. L. Stellar of American Cyanamid Co.

8. Formulation(s): Cygon 400 (4lb/gal) Systemic insecticide containing 43.5% active ingredient EPA Reg. # 241-233

9. Inerts Status: All cleared in 40 CFR 180.1001

1

18. Animal Metabolism Data Applicable Here: #16

19. Nature of Animal Metabolism Data is/is not adequately defined. The Residue of Concern is: #16

20. Analytical Methods (reference or brief description): Several methods are available for determining dimethoate and its oxygen analog and are listed in PAM Vol II. The determinative steps are by GLC and colorimetric. The method of Stiller W A and Casey A N. JAOAC 47 645 (1964) was used for plum tissue and green beans in connection with PP# 585.

21. Method Validation (crop recoveries): 90% for dimethoate on green beans and 93% for the oxygen analog on green beans as recorded in PAM Vol II.

22. Method Validation (control values): < 0.1 ppm for dimethoate and oxygen analog

23. Residues Determined by Method: dimethoate and oxygen analog.

24. Enforcement Methodology (is) is not available.

25. Residue Data (crop and maximum residue from Proposed Use):

Crop (ppm range): No data submitted

Crop (ppm range): _____

Crop (ppm range): _____

Other Comments: Data have been reviewed with earlier petitions 3F0385 and 5F1642, for residues of dimethoate on green, snap and lima beans and soybeans. These data support the 2ppm tolerance established for dry beans.

26. Residues will not exceed proposed tolerance on (commodities) Lentils as translated from above data.

and will exceed proposed tolerance on (commodities) _____

27. Livestock Feeding Studies on (species): N/A

28. Animal Feeding Levels: _____

29. Animal Residue Ingestion Levels from Proposed Crop Tolerance Levels (proposed tol. level x % in diet): _____ ppm in beef cattle; _____ ppm in dairy cattle/goats; _____ ppm in hogs; _____ ppm in horses; _____ ppm in sheep; _____ ppm in poultry.

30. Livestock Tolerances are Adequate in (species) _____, _____, _____, but not adequate in _____, _____, _____, _____

31. Livestock T(erances Need to be Esta(ished: yes/no. If yes (species/levels): ______

32. Other Comments: Although forage and vines can be grazed after harvest of lentils the label restricts against grazing of livestock. (This applies to the already est. tol on beans, etc.) It has been determined that such a restriction is practical

33. Other Considerations: ______

34. Additional Data Needed: None

35. Recommendations: Toxicology and EAB considerations permitting, we recommend for the proposed tolerance of 2 ppm for residues of dimethoate and its oxygen analog in or on lentils.

36. Other Comments under Recommendations: ______

37. Compatability with Codex Tolerances: The 2 ppm level proposed for lentils is compatible with the Codex level of 2 ppm for "vegetables".

cc: RF, Circ, Reviewer, Thompson, Tox, EEB, EFB, FDA, PP#

Approved: Quick PHQ 8/9/83 Schmitt RPS 8/9/83

INTERNATIONAL RESIDUE LIMIT STATUS

I.L. 8/3/83

CHEMICAL Dimethoate PETITION NO 3E2890

CCPR NO. 27 Reviewer: Jane E. Mayer

Codex Status

☐ No Codex Proposal Step 6 or above

Proposed U. S. Tolerances

Residue (if Step 9): Sum of dimethoate and omethoate resulting from the use of formothion, dimethoate and omethoate

Residue: Dimethoate and its oxygen analog

Crop(s)	Limit (mg/kg)
vegetables	2

Crop(s)	Tol. (ppm)
lentils	2 ppm

CANADIAN LIMIT

Residue: parent + omethoate

MEXICAN TOLERANCIA

Residue:

Crop	Limit (ppm)
none	(on lentils)

Crop	Tolerancia (ppm)
none	(on lentils)

Notes:

1 of 1

#5