PMSD ISB
1761 J

19 AUG 1987

RESIDUE CHEMISTRY BRANCH, HED
PETITION REVIEW QUICK FORM

FROM: John H. Onley, Ph.D., Chemist, Section Head
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

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

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

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

1. Petition No(s).: 7E3532; RCB#-2483; MRID#-402248-00
2. Chemical(s): Dimethazone (Command)
3. Tolerance Proposal (RAC's & Levels): pumpkin @ 0.1ppm
4. Petitioner: IR-4
5. Tolerance Expression: Residues of 2-[(2-chlorophenyl)-methyl]-4,4-dimethyl-3-isoxazolidinone
6. Established Tolerances: 40 CFR 180.425 - 0.05ppm in or on soybeans
7. Letter(s) of Authorization (if applicable): FMC Corporation-(E. Cuirle to R. Taylor-EPA)
8. Formulation(s): Command® 4EC, EPA Reg. No. 279-3053, an emulsifiable concentrate containing 4 lbs a.i./gal.
9. Inerts Status: Cleared under Section 180.1001(c) or (d)

** 773

10. Manufacturing Process: Discussed in RCB's 9/24/84 review of PP#4F3128. Technical product is [redacted] pure. Inpurities are not expected to present a residue problem.

11. Proposed Use(s): _____

For control of many annual grass and broadleaf weeds on pumpkins:

Apply 1 quart (1 lb. ai) per acre COMMAND 4EC to the soil surface and uniformly incorporate before plantiong. Equipment should be set to incorporate COMMAND 4EC herbicide to a depth of 3 inches or less in the final seed bed.

12. Plant Metabolism Data on: soybeans and alfalfa (PP#4F3128 and EPA Registration No. 279-3052, -3053)

13. Plant Residues Comprised of: parent-2-[(2-chlorophenyl)-methyl]-4,4-dimethyl-3-isooxazolidinone (Note: a change in the prdposed use may require more plant metabolism work.)

14. Plant Metabolism Data Translatable Here: #12

15. Nature of Plant Metabolism Data (is)/is not adequately defined.

The Residue of Concern is: per #5

16. Animal Metabolism Data on: N.A.

17. Animal Residues Comprised of: N.A.

18. Animal Metabolism Data Applicable Here: N.A.

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

20. Analytical Methods (reference or brief description): Derived from FMC method P-0908. Method consists of acid hydrolysis, hexane partition, sodium bicarbonate wash, Florisil cleanup, and quantitation with GC (NPD) steps. Detection limit for dimethazone = 0.02 ppm

21. Method Validation (crop recoveries): On pumpkins - 93 to 102% fortified at 0.1 ppm dimethazone; 92 to 105% fortified at 1.0 ppm.

22. Method Validation (control values): In pumpkins, controls are reported as N.D. (less than 0.02 ppm) except in WI where controls ranged from 0.04 to 0.07 ppm

23. Residues Determined by Method: Parent compound - dimethazone.

24. Enforcement Methodology (is)/is not available. In PAM II.

8 775

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

Crop: Pumpkins; studies carried out in CA, IL, NY, PA, VA, and WI. Application rate = 1.0 lb. a.i./A. Residue data reflect preplant incorporated and post-plant preemergence applications with PHI's ranging from 90 to 110 days. Residue data on treated samples reported as N.D. (less than 0.02 ppm) at all test sites except WI where values ranged from N.D. to 0.04 ppm.

26. Residues will not exceed proposed tolerance on (commodities) pumpkins (0.1 ppm)

and will exceed proposed tolerance on (commodities) _____

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

28. Animal Feeding Levels: N.A.

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; _____ N.A. ppm in hogs; _____ ppm in horses; _____ ppm in sheep; _____ ppm in poultry.

30. Livestock Tolerances are Adequate in (species) _____ N.A. , but not adequate in 776

31. Livestock Tolerances Need to be Established: yes/no. If yes (species/levels): N.A.

32. Other Comments: None

33. Other Considerations: None

34. Additional Data Needed: None

35. Recommendations: If TOX and EAB considerations permit, RCB recommends for the establishment of a 0.1 ppm dimethazone, 2-[(2-chlorophenyl)-methyl]-4,4-dimethyl-3-isoxazolidinone, on pumpkins.

36. Other Comments under Recommendations: None

37. Compatability with Codex Tolerances: No Codex, Mexican, or Canadian tolerance has been established on pumpkins. Codex sheet is attached.

777

cc: RF, Circ, Reviewer-Onley, TOX, PMSD/ISB, PP# 7E3532

Approved: Onley I.H.O. - 8/19/87; Schmitt L.L. Schmitt

5

INTERNATIONAL RESIDUE LIMIT STATUS

J. Onley 8/19/87

CHEMICAL Dimethazone

CODEX NO. ____

CODEX STATUS:

☑ No Codex Proposal Step 6 or above

Residue(if Step 8): ____

Crop(s)	Limit (mg/kg)

PROPOSED U.S. TOLERANCES:

Petition No. 7E3532

RCB Reviewer J. Onley

Residue: parent-dimethazone

Crop(s)	Limit (mg/kg)
Pumpkins	0.1

CANADIAN LIMITS:

☑ No Canadian limit

Residue: ____

Crop(s)	Limit (mg/kg)

MEXICAN LIMITS:

☑ No Mexican limit

Residue: ____

Crop(s)	Limit (mg/kg)

178

NOTES:

Form revised 1986

6