PM 50/LSB

JUL 13 1987 1687

RESIDUE CHEMISTRY BRANCH, HED
PETITION REVIEW QUICK FORM

FROM: Maxie Jo Nelson, Chemist mjn
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Robert S. Quick Section Head
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. Petition No(s).: 7E3536 RCB# 2482, MRID# 402324-00, -01.
2. Chemical(s): Chlorpyrifos
3. Tolerance Proposal (RAC's & Levels): 0.1 ppm (of which no more than 0.05 ppm is chlorpyrifos) - cherimoya, sapote, guava (pineapple).
4. Petitioner: IR-4 and Ag. Exp. Stn. of CA
5. Tolerance Expression: parent plus metabolite (3,5,6-trichloro-2-pyridinol)
6. Established Tolerances: 40 CFR 180.342
0.05-15 ppm, various RAC's (incl. several tree fruits)
7. Letter(s) of Authorization (if applicable):
Dow Chemical USA - 5/18/87
8. Formulation(s): Lorsban 4E Insecticide
EPA Reg. No. 464-448 4 lbs ai/gal. EC
9. Inerts Status: under RD purview

10. Manufacturing Process: Described in Confidential Appendix A of the Registration Standard (9/30/84). Technical is ≥ 94% pure; impurities pose no residue problem. Product chemistry data gaps have been addressed. (See references in N. Dodd review of PP# 6E3439, 12/1/86.)

11. Proposed Use(s):

CHERIMOYA, PINEAPPLE GUAVA, AND SAPOTE (CA ONLY)

For the control of Argentine Ant (Iridomyrmex humilis): Spray 2-4 oz. per tree of a 3% solution of LORSBAN in water as a direct spray to the base of the tree trunk and adjacent soil after previous crop is harvested but before new fruit is set. Do not apply more than 0.4 lb a.i. per acre per year or make application within 7 months of harvest. Do not allow meat or dairy animals to graze in treated orchards.

Based on available residue data this use is limited to California.

12. Plant Metabolism Data on: Ref. the Registration Standard (9/30/84) and the summary discussion of N. Dodd, PP# 6E3439, 12/1/86. [corn, beans, apples, soybeans]

13. Plant Residues Comprised of: parent; 3,5,6-trichloro-2-pyridinol (TCP); and various minor metabolites.

14. Plant Metabolism Data Translatable Here: #12.

15. Nature of Plant Metabolism Data (is)/~~is not~~ adequately defined. (~~for~~ the purpose of this petition, which is on tree fruit RAC's). The Residue of Concern is:

Parent plus TCP

16. Animal Metabolism Data on: N/A. There are no animal feed items associated with this petition.

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17. Animal Residues Comprised of: N/A. See #16.

18. Animal Metabolism Data Applicable Here: N/A. See #16.

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

20. Analytical Methods (reference or brief description):
Chlorpyrifos residues were determined by the PAM II, Method I procedure (FPD/GLC) and TCP residues by the Method VII procedure (EC/GLC).
Chlorpyrifos is also completely recovered by PAM I Multiresidue procedures.
Representative chromatograms were submitted.

21. Method Validation (crop recoveries): Cherimoya
Chlorpyrifos 0.05-0.25 ppm fortification 90-100% recovery
TCP " " " 95-96% "

22. Method Validation (control values): Cherimoya
<0.05 ppm of chlorpyrifos; <0.05 ppm of TCP

23. Residues Determined by Method: Chlorpyrifos and TCP are determined as separate entities per #20.

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

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

MRID 402324-01

Crop: Cherimoya <0.05 ppm chlorpyrifos; <0.05 ppm TCP [supplemental data on peaches and nectarines, 0.05 ppm tolerances, in PP# 3F1306 support NDR findings.]

No data submitted for sapote or pineapple guava.

1985-86 crop year; 7 mo PHI; one trial (CA); frozen storage 6 mos. before analysis for chlorpyrifos, and 3 mos. for TCP.

1X and 2X rate (100 trees/A)

Other Comments: concurrent storage stability studies run with chlorpyrifos and TCP, each fortified @ 0.05-0.25 ppm. Recoveries were 80-104% chlorpyrifos (5½ months) and 84-100% TCP (2+ months).

26. Residues will not exceed proposed tolerance on (commodities) cherimoya and (by translation) sapote and pineapple guava and will exceed proposed tolerance on (commodities) _____

27. Livestock Feeding Studies on (species): N/A. See #16.

28. Animal Feeding Levels: N/A. See #16.

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.

N/A

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

N/A

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31. Livestock Tolerances Need to be Established: yes/no. If yes (species/levels): N/A. See #16.

32. Other Comments: Pineapple guava is more appropriately called feijoa. (See memo of Carl Grable, 5/1/86.) A revised Section F needs to be submitted in which the tolerance is proposed in terms of: "feijoa (pineapple guava)". Section B should be revised to include the term, feijoa.

33. Other Considerations: Cherimoya, sapote, and feijoa are listed as minor crops, per FR, Vol. 51, p. 11344, 4/2/86.

There is a Registration Standard (9/30/84) on chlorpyrifos.

34. Additional Data Needed: None.

35. Recommendations: Negative, at this time, for the reasons cited in #32. A revised Section F for "feijoa (pineapple guava)" is needed. A revised Section B to propose the use in terms of feijoa (pineapple guava) is needed.

36. Other Comments under Recommendations: If/when the proposed tolerances are established, they will need to be placed in a separate subsection of 40 CFR 180.342 and designated as tolerances with regional registration.

37. Compatability with Codex Tolerances: N/A. See Attachment.

cc: RF, Circ, Reviewer, ISB/PMSD, TOX, EEB, EAB, , PP# 7E3536
Approved: Quick RMQ 6/13/87; Schmitt RDS 6/13/87

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INTERNATIONAL RESIDUE LIMIT STATUS

J. Knes 7/6/87

CHEMICAL Chlorpyrifos

CODEX NO. 017

CODEX STATUS:

[V] No Codex Proposal Step 6 or above (on commodities listed)

Residue(if Step 8): chlorpyrifos only

Crop(s)	Limit (mg/kg)

PROPOSED U.S. TOLERANCES:

Petition No. 7E3536

RCB Reviewer Nelson

Residue: parent + 3,5,6-trichloro-2-pyridinol

Crop(s)	Limit (mg/kg)
cherimoya, pineapple guava, sapote	0.1

CANADIAN LIMITS:

[V] No Canadian limit(on commodities listed)

Residue:

Crop(s)	Limit (mg/kg)

MEXICAN LIMITS:

[V] No Mexican limit(on commodities listed)

Residue:

Crop(s)	Limit (mg/kg)

NOTES:

Form revised 1986

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