FROM: K. Ante, Chief, Chemist  
Residue Chemistry Branch  
Hazard Evaluation Division (TS-769)

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

TO: Hoyt Jamerson  
Reg. No. 43  
Registration Division (TS-767)

and  
Toxicology Branch  
Hazard Evaluation Division (TS-769)

1. Petition No(s): 3E2866

2. Chemical(s): Chlorpyrifos

3. Tolerance Proposal (RAC's & Levels): 0.05 ppm on mushrooms

4. Petitioner: IR-4 and Ag Exp Stats of DE, MD, MI, PA, and the USDA

5. Tolerance Expression: Chlorpyrifos and its metabolite 3,5,6-trichloro-2-pyridinol

6. Established Tolerances: many at level from 0.05 to 15 ppm, Sec. 180.342

7. Letter(s) of Authorization (if applicable): Letter of 9/27/83, Robert Bischoff, Dow to Hoyt Jamerson 1619

8. Formulation(s): Lorsban 4E, contains 4 lb. mit/ gallo.  
EPA Reg. No. 464-448

9. Inerts Status: All inert are cleared under Sec. 180.1001

11. Proposed Use(s): For control of semi-hard flya, Lorsban 4E is to be applied at a rate equivalent to 15 ppm a.i. based on the weight of the wet compost, in sufficient water to attain desired moisture content in compost. For application purposes, a spreading diagram for each label is attached.

12. Plant Metabolism Data on: Corn and Beans (PB#P2883); Apple and Soybeans (PB#F2281).


14. Plant Metabolism Data Translatable Here: Since the metabolism on corn, beans, apples, and soybeans is similar, we consider the metabolism in plants to be understood.

15. Nature of Plant Metabolism Data is not adequately defined. The Residue of Concern is: parent plus TCP.

16. Animal Metabolism Data on: N/A - No feed item associated with this petition.

450
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):
For this petition only, TCP was analyzed as: formaldehyde. A Tier 1 method using GC-MS was used.

21. Method Validation (crop recoveries): Mushroom samples contained 0.5-10 ppm, gas recoveries of 100-120%

22. Method Validation (control values): <0.05 ppm

23. Residues Determined by Method: TCP method, above

24. Enforcement Methodology is/are available.
25. Residue Data (crop and residue range (ppm) from Proposed Use):
   Crop: maize  no residues detected (≤0.05 ppm TCP; since residues are
   crop: registered as TCP (MW=198.4) actual
   crop: residues of chlorpyrifos (MW=350.6)
   crop: may be hidden, to emit ≤0.05 ppm of
   all TCP derived from hydrolysis of parent.

   Other Comments: A record-keeping program
   is needed for the tolerance levels of TCP in which the
   level of parent is included. Thus type of tolerance would not
   be as accurate in mushrooms unless additional residues data
   is included in mushrooms. (see Note #1)

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

   may;

   and will exceed proposed tolerance on (commodities) mushrooms, a tolerance of 0.1 ppm is needed.

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): N/A 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) N/A

   _____________________________, but not adequate in

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

32. Other Comments:

33. Other Considerations:

34. Additional Data Needed:

35. Recommendations: Because only TCD was determined,
residues of chlorpyrifos in rice can be higher
than the limit of detection (LLOD) of 0.05 ppm.
We recommend against the proposed tolerance.

36. Other Comments under Recommendations: We could
recommend for a tolerance of 0.1 ppm,

37. Compatibility with Codex Tolerances: Codex tolerance for
chlorpyrifos on mushrooms is 0.05 ppm, but
only parent is regulated. Codex sheet attached.

cc: RF, Circ, Reviewer, Thompson, TOX, EEB, EFB, FDA, PP# 312356
Approved: Quick 7/21/83; Schmitt 7/21/83
BEST AVAILABLE COPY

INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL: Chlorpyrifos
CCPR NO.: 17

Codex Status

☐ No Codex Proposal
   Step 6 or above

Residue (if Step 9):

chlorpyrifos

Crop(s) Limit (mg/kg)

Mushrooms 0.05 ppm

CANADIAN LIMIT
Residue: chlorpyrifos plus TCP

Crop Limit (ppm)

None on the above commodity.

NOTES:

PETITION NO. BIE2886

Proposed U.S. Tolerances

Residue: Parent plus TCP

Crop(s) Tol. (ppm)

Mushrooms 0.05 ppm

MEXICAN TOLERANCIA
Residue: 

Crop Tolerancia (ppm)

None on the above commodity.

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