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AUG 24 1983

RESIDUE CHEMISTRY BRANCH, HED
PETITION REVIEW QUICK FORM

FROM: K. Arlu ^{WAA}, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

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

TO: Hout Jamerson DM No. 43
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation Division (TS-769)

1. Petition No(s): 3 E2826
2. Chemical(s): Chlorpyrifos
3. Tolerance Proposal (RAC's & Levels): 0.05 ppm in or
on mushrooms
4. Petitioner: IR-4 and Ag Exp Stns 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 4/27/83,
Robert Bischoff, Dir to Hout Jamerson, IR-4
8. Formulation(s): Lorsban 4E, contains 4 lb active /
gallon. EPA Reg. No. 464-448.
9. Inerts Status: All inerts are cleared under
Section 180.1001

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10. Manufacturing Process: See PPF 4F1415, memo of
5/3/74, A. Smith.
11. Proposed Use(s): For control of sclerotinia, Lorstar
4E is to be applied at a rate equivalent to
15 ppm a.c., based on the weight of the wet
compost, in sufficient water to obtain desired
moisture content in compost. One application
per crop, at spraying, is sufficient. (The first
two or three applications occur in the weeks
after spraying).
12. Plant Metabolism Data on: Corn and Beans (PPF 3F228)
Apples and soybeans (PPF 3F228).
13. Plant Residues Comprised of: Parent plus TCP
metabolite.
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 ~~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.

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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
per Federal Register entry of 9/19/80 to IR-4.
Residues are hydrolyzed with base, cleaned
by partitioning and column chromatography
then silylated before determination (GC) as
TCP. Residues are reported as TCP.
21. Method Validation (crop recoveries): Mushroom samples
infused at 0.5-1.0 ppm gave recoveries of
100-120%.
22. Method Validation (control values): 40.65 ppm
23. Residues Determined by Method: TCP method, above
24. Enforcement Methodology is/~~is not~~ available.

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

Crop: mushrooms - no residues detected
(<0.05 ppm TCP; since residues are
 crop: reported as TCP (MW=198.4) actual
residues of chlorpyrifos (MW=350.6)
 crop: may be higher, to about 0.09 ppm if
all TCP derived from hydrolysis of parent.

Other Comments: I request action, PRA 37204, pesticides
rule (in place of existing tolerances) in which the
level of parent is specified. This type of tolerance would not
be adequate for mushrooms unless additional residue data
on which parent is determined are submitted.

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

and ^{may} 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 _____

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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 TCP was determined
residues of chlorpyrifos may be higher
than the limit of detection for TCP, 0.05 ppm.
We recommend against the proposed tolerance

36. Other Comments under Recommendations: Sheet could
recommend for a tolerance of 0.1 ppm,
TOX considerations permitting.

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

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INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL Chlorpyrifos
CCPR NO. 17

PETITION NO. 3E2886

Codex Status

Proposed U.S. Tolerances

☐ No Codex Proposal
Step 6 or above

Residue (if Step 9): _____

chlorpyrifos

Residue: Parent plus

TCP

Crop(s) Limit (mg/kg)

Mushrooms 0.05 ppm

Crop(s) Tol. (ppm)

mushrooms 0.05 ppm

CANADIAN LIMIT

Residue: chlorpyrifos plus
TCP

Crop Limit (ppm)

None on the above
commodity.

NOTES:

MEXICAN TOLERANCIA

Residue: _____

Crop Tolerancia (ppm)

None on the above
commodity.

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