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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460


4-3-84


APR 3 1984

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#3E2819. (No Accession number). Chlorpyrifos in or on the crop brassica leafy vegetables. Amendment of 2/1/84.

FROM: Jesse E. Mayes, 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, PM 43
Registration Division (TS-767)

and
Toxicology Branch
Hazard Evaluation Division (TS-769)

The petitioner submitted an amendment in response to our letter of January 6, 1984 (Hoyt Jamerson). The amendment included a discussion of the data on turnip greens which had been submitted with an earlier amendment of 7/13/83 and a reference to support the petitioner's contention that data on turnip greens is an adequate substitute for a representative of a leafy vegetable in the brassica leafy vegetable crop group. No new information was submitted with this amendment.

The referenced turnip green data consisted of summary data which was originally submitted with PP#0E2411. Residue studies were conducted in New Hampshire, Michigan and Washington in which applications of Lorsban 15G and Lorsban 4E were made at the rate of 1.65 fl oz ai/1,000 ft row. (The proposed use is for 0.69-1.38 oz ai/1,000 ft row for the 15G incorporated in the soil and 0.8-1.38 ai/1,000 ft row for the 4E incorporated in the soil or applied to base at the time of transplanting. Two applications were made: 15G incorporated in the soil at planting and 4E applied to soil at thinning (30-43 days before harvest). Total residues of parent and metabolite in turnip tops ranged from <0.03 to 0.7 ppm in turnip tubers 0.16 to 1.6 ppm.

1/3 012

These data indicate that the proposed tolerance would not be exceeded.

We concluded in an earlier review that we could not substitute the turnip green data for a leafy crop representative in the brassica crop group. However, we have reconsidered that position and now conclude that, these data can be substituted.

Recommendation

Toxicology and EAB considerations permitting, we recommend that the proposed 2 ppm chlorpyrifos tolerance be established in or on the crop group brassica leafy vegetables.

Other Comments

An International Residue Limit Status sheet is attached to this review. Mexico has not established any tolerances on brassica leafy vegetables; Canada has established negligible residue type tolerances of 0.1 ppm on broccoli and cabbages. Codex has established a limit of 1 ppm on kale and Chinese cabbage. Because of the accuracy of the analytical methodology the residue data reported, and other factors, we conclude that the proposed U.S. tolerance of 2 ppm for the "crop group brassica leafy vegetables" should not be any lower; thus, the proposed U.S. and Codex tolerances are not compatible.

cc: R.F., Circu, Reviewer, TOX, EEB, EAB, PP#3E2819
FDA, Robert Thompson
RDI:JHO:3/28/84:RDS:3/29/84
TS-769:RCB:Reviewer:JEM:wh:RM810:CM#2:3/29/84

INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL Chlorpyrifos

PETITION NO. 3E2819

CCPR NO. 17

Reviewer: Jesse E. Mayes

Codex Status _____

Proposed U.S. Tolerances

No Codex Proposal
Step 6 or above

*confirmed
3/29/84
J.E.*

Residue (if Step 9): _____

Residue: Chlorpyrifos &

parent only 1/

3,5,6-trichloro-2-pyridinol

Crop(s) Limit (mg/kg)

Crop(s) Tol. (ppm)

Chinese cabbage 1
Kale 1

Chinese Broccoli 2 ppm
Broccoli raab 2 ppm
Savoy cabbage 2 ppm
Collards 2 ppm
Kale 2 ppm
Kohlrabi 2 ppm
Mustard greens 2 ppm
Rape greens 2 ppm

CANADIAN LIMIT

MEXICAN TOLERANCIA

Residue: _____

Residue: _____

Presumably parent on these
commodities 2/

Crop Limit (ppm)

Crop Tolerancia (ppm)

Broccoli 0.1 2/
Cabbages 0.1 1/

None (on these commodities)

NOTES:

1/ Aside from numerical considerations, consideration needs to be given as to whether the U.S. definition can be made compatible with Codex.

2/ Negligible residue type tolerances.