

US EPA ARCHIVE DOCUMENT



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

DEC 3 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: PP#1F2620/2H5331 Chlorpyrifos on apples.
Amendment of 10/19/82

From: K.H. Arne, Ph.D., Chemist *K.H. Arne*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

Thru: Charles L. Trichilo, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769) *[Signature]*

To: Jay Ellenberger, PM Team No. 17
Registration Division (TS-767)

and

Toxicology Branch
Hazard Evaluation (TS-769)

With this amendment the petitioner submits his latest proposal to allow use of chlorpyrifos on apples without effecting an unacceptably high tolerance (to TOX). In an 8/11/82 amendment, the petitioner had revised Section B to increase the PHI from 14 to 28 days and impose a 21 day waiting period between the final two treatments. Section F proposed tolerances of 1 and 8 ppm for apples and dried apple pomace, respectively, (see our memo of 10/6/82). We recommended against these tolerances because the residue data wasn't representative of this use and because it showed, by extrapolation, that residues of greater than 1 ppm might occur.

The petitioner is now submitting a revised Section B in which the maximum application rate is lowered from 2.0 to 1.5 a.i./A and a revised Section F in which tolerances of 1.5 and 12 ppm are proposed for apples and dried apple pomace, respectively.

There are no residue data strictly representative of the proposed use. The highest residue found at a 28 day PHI, 2.35 ppm, resulted from 9 applications of 2 lb a.i./A with 8 days between the final two applications. As is now proposed only 8 applications are allowed. By extrapolation of existing data we estimate that the newly proposed use will not result in residues on apples of greater than 1.5 ppm. Our calculation for the highest residue is as follows:

$$\frac{8 \text{ appl. allowed}}{9 \text{ appl. used}} \times \frac{1.5 \text{ lb a.i./A allowed}}{2.0 \text{ lb a.i./A used}} \times 2.35 \text{ ppm} = 1.56 \text{ ppm}$$

Since the new use calls for 21 days to pass between the final two applications the 1.56 ppm calculated value is somewhat exaggerated; expected residues would be accommodated by a 1.5 ppm tolerance.

Meat and milk

In our original review of this petition (memo of 3/24/82) we recommended raising the tolerances for the meat, fat, and meat byproducts of horses, goats, and sheep to 1.5 ppm (a tolerance of 1.0 ppm is now established) mainly because of the significant burden of residues that dried apple pomace, at a tolerance of 30 ppm, would provide to these animals. By lowering the tolerance for dried apple pomace to 12 ppm this concern is removed; existing tolerances for meat and milk are adequate.

Recommendation

Toxicological considerations permitting, we recommend for the proposed tolerances on apples (1.5 ppm) and dried apple pomace (12 ppm).

TS-769:RCB:KArne:CM#2:Rm810:X77377:12/2/82
 cc: RF, Circ., Arne, Thompson, FDA, TOX, EEB, EFB, PP#1F2620/2H5331
 RDI: Quick, 12/1/82; Schmitt, 12/1/82

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INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL ChlorpyrifosPETITION NO. 1F2620/2H5331CCPR NO. 17Codex StatusProposed U.S. Tolerances

No Codex Proposal Step
6 or above

Residue (if Step 9): _____

Residue: parent plus TCP ^{1/}chlorpyrifos

<u>Crop(s)</u>	<u>Limit (mg/kg)</u>
apples	1 ppm

<u>Crop(s)</u>	<u>Tol. (ppm)</u>
apples	<u>LS</u> 3 ppm
dried apple pomace 6 ppm	12 ppm

CANADIAN LIMITMEXICAN TOLERANCIA

Residue: _____

Residue: parent presumably

<u>Crop</u>	<u>Limit (ppm)</u>
none (on above commodity)	

<u>Crop</u>	<u>Tolerancia (ppm)</u>
apples	0.05 ppm

Notes: ^{1/} ~~compatibility of residue with Codes possible?~~