MEMORANDUM


From: John H. Onley, Ph.D, Chemist Residue Chemistry Branch Hazard Evaluation Division (TS-769)

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

To: Franklin D. R. Gee, Product Manager No. 17 Insecticide-Rodenticide Branch Registration Division (TS-767)

FMC Corporation and ICI Americas Inc. have submitted the subject amendments in response to several deficiencies discussed at a March 15, 1982 meeting (see also our related memoranda of 3/19/82 and 3/22/82); these deficiencies had been outlined previously in several of our reviews relating to the subject petitions. The deficiencies are reiterated below followed by the petitioners' responses and our comments/conclusions.

PP#8F2099/FAP#8H5190 (ICI)

Deficiencies

1. A revised Section B was needed in which a label restriction is imposed against use on small varieties of tomatoes.

2. A revised Section F was needed in which a 5.0 ppm permethrin tolerance is proposed on celery and a 175 ppm food additive tolerance is proposed on dried tomato pomace.
Petitioner's Responses to the Above Deficiencies.

1. The Petitioner has imposed the following restriction on the proposed label: "Do not apply to cherry tomatoes or other varieties which produce mature fruit less than one inch in diameter."

2. A revised Section F was submitted; it contains a proposed tolerance of 5.0 ppm permethrin on celery and a proposed FAT of 175 ppm permethrin on tomato pomace.

Our Comments/Conclusions

We conclude that deficiencies 1 and 2 above have been resolved.

PP#9F2207/FAP#9H5219 (ICI)

Deficiencies

1. A revised Section B was needed in which the label contains a one day PHI on broccoli and cauliflower; a 1-day PHI has already been imposed on brussels sprouts.

2. A revised Section F was needed wherein the 5.0 ppm permethrin FAT on broccoli stalks has been withdrawn.

Petitioner's Responses to the Above Deficiencies.

1. A revised Section B was submitted. It now contains a 1-day PHI for broccoli, cauliflower and brussels sprouts.

2. The proposed FAT of 5 ppm on broccoli stalks was withdrawn in a revised Section F.

3. This amendment also confirms ICI's request that sweet corn be withdrawn from PP#9F2207.

Our Comments/Conclusions

We conclude that deficiencies Nos. 1 and 2 above have been resolved.
Deficiency

1. A revised Section F was needed wherein a 2.0 ppm tolerance is proposed on tomatoes and a 175 ppm FAT is proposed on tomato pomace. Previously, a 1.5 ppm permethrin tolerance was proposed on fresh tomatoes and a 185 ppm FAT was proposed on tomato pomace.

Petitioner's Response to the Above Deficiency.

1. The petitioner submitted a revised Section F that proposes a 2.0 ppm permethrin tolerance on fresh tomatoes, a 20 ppm tolerance on lettuce and a 175 ppm permethrin tolerance on tomato pomace.

Our Comments/Conclusions

We conclude that deficiency number 1 above has been resolved.

Deficiencies

1. A revised Section B was needed wherein the label contains a restriction for "ground" applicaton only.

2. A revised Section F was needed wherein a 3.0 ppm permethrin tolerance is proposed on fresh apples. Previously, a 2.5 ppm permethrin tolerance was proposed on apples.

Petitioner's Response to the Above Deficiencies.

1. The Petitioner submitted a revised Section B in which a restriction for ground application only has been imposed on the label.

2. A revised Section F has been submitted; it contains a proposed tolerance of 3.0 ppm on apples.

Our Comments/Conclusions.

We conclude that deficiencies 1 and 2 above have been resolved.
Deficiency

1. A revised Section F was needed wherein the metabolites DCVA, and 3-PB Alcohol were included in the tolerance proposal.

Petitioner's Response to the Above Deficiency

1. A revised Section F was submitted; the tolerance proposal now contains the metabolites DCVA and 3-PB Alcohol.

Our Comments/Conclusions

We conclude that the above deficiency has been resolved.

Deficiencies

1. A revised Section B was needed wherein the label would have a shipping restriction for swine.

2. A revised Section F was needed wherein all proposed permethrin tolerances on meat, milk, poultry and egg have been consolidated.

Petitioner's Response to the Above Deficiencies.

1. The Petitioner has submitted a Revised Section B in which the label states, "For swine: do not ship animals for slaughter within 5 days of last treatment."
2. A revised Section F has been submitted; it contains the following proposed tolerances on meat, milk, poultry and eggs commodities:

1.0 ppm in the meat of cattle, goats & sheep  
5.0 ppm in the fat of cattle, goats & sheep  
3.0 ppm in the meat byproducts of cattle, goats & sheep  

1.0 ppm in the meat of hogs  
5.0 ppm in the fat of hogs  
4.0 ppm in the meat byproducts of hogs  

1.0 ppm in the meat of horses  
4.0 ppm in the fat of horses  
3.0 ppm in the meat byproducts of horses  

0.2 ppm in the meat of poultry  
1.0 ppm in the fat of poultry  
1.0 ppm in the meat byproducts of poultry  
0.1 ppm in eggs  

6.25 ppm in milk fat reflecting residues of 0.25 ppm in whole milk.

Conclusions/Recommendations

ICI has resolved all of the deficiencies relating to PP#8F2099, FAP#8H5190, PP#9F2207/FAP#9H5219, PP#9F2247/FAP#9H5235, PP#0F2307 and PP#1F2564. FMC has resolved those deficiencies related to PP#9F2243/FAP#9H5234; however, in order to resolve all of the present considerations for permethrin tolerances on animal commodities, we will need from FMC a revised Section F giving all of the proposed tolerances on meat, milk, poultry and eggs commodities. Upon receiving this revised Section F, FMC will have resolved all the deficiencies for tolerances on meat, milk, poultry and egg commodities.

If TOX and EFB considerations permit, RCB recommends that those proposed tolerances involving the above amendments be established.
INTERNATIONAL RESIDUE LIMIT STATUS

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>Permethrin</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPR NO.</td>
<td>120</td>
</tr>
<tr>
<td>PETITION NO.</td>
<td>8E2096/8H5190</td>
</tr>
</tbody>
</table>

**Codex Status**

/ X /  No Codex Proposal
Step 6 or above

**Residue (if Step 9):** Permethrin

(sum of isomers)

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Limit (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>soybeans</td>
<td>0.1*</td>
</tr>
</tbody>
</table>

**Proposed U.S. Tolerances**

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Tol. (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) soybeans (seeds only)</td>
<td>0.1</td>
</tr>
<tr>
<td>(2) meat and meat byproducts</td>
<td></td>
</tr>
<tr>
<td>of cattle, goats, hogs, horses</td>
<td>0.05</td>
</tr>
<tr>
<td>and sheep</td>
<td></td>
</tr>
<tr>
<td>(3) poultry and eggs</td>
<td>0.05</td>
</tr>
<tr>
<td>(4) milk</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**CANADIAN LIMIT**

Residue:  

<table>
<thead>
<tr>
<th>Crop</th>
<th>Limit (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (on above commodities)</td>
<td></td>
</tr>
</tbody>
</table>

**MEXICAN TOLERANCIA**

Residue:  

<table>
<thead>
<tr>
<th>Crop</th>
<th>Tolerancia (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (on above commodities)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:** * As noted, there is no Codex limit at Step 6 or above. There are Step 5 temporary limits on numerous commodities (including soybeans at 0.1 ppm). Temporary limits are ineffect because of TOX and Chemistry deficiencies, as well as scarcity of information on approved uses.
**INTERNATIONAL RESIDUE LIMIT STATUS**

**CHEMICAL**

**CCPR No.**

**Codex Status**

☐ No Codex Proposal
Step 6 or above

**Residue (if Step 9):**

---

**Crop(s)** | **Limit (mg/kg)**
--- | ---

**Proposed U.S. Tolerances**

**Residue:** Permethrin

---

**Crop(s)** | **Tol. (ppm)**
--- | ---
soybeans oil | 0.5
soybeans hulls | 0.5
soybeans soapstocks | 0.5

**CANADIAN LIMIT**

**Residue:**

---

**Crop** | **Limit (ppm)**
--- | ---

None (on above commodities)

**MEXICAN TOLERANCIA**

**Residue:**

---

**Crop** | **Tolerancia (ppm)**
--- | ---

None (on above commodities)

**NOTES:**

Page 2 of 2
INTERNATIONAL RESIDUE LIMIT STATUS

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>Permethrin</th>
<th>PETITION NO. 8E2099/8H5190</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPR NO.</td>
<td>120</td>
<td>Reviewer: J. Onley</td>
</tr>
</tbody>
</table>

**Codex Status**

✓/x No Codex Proposal Step 6 or above

**Proposed U.S. Tolerances**

Residue (if Step 9): Permethrin

(sum of isomers)

Crop(s) Limit (mg/kg)

Celery 1/ 5

Crop(s) Tol. (ppm)

Celery 5

**Canadian Limit**

Residue: __________________________

Crop Limit (ppm)

None (on celery)

**Mexican Tolerancias**

Residue: __________________________

Crop Tolerancia (ppm)

None

1/ Codex temporary limit is currently at step 5 (10/22/81) and is a temporary limit.

Notes:
Proposed U.S. Tolerances

Residue: 3-phenoxypyphenyl methyl (f)-
- cis, trans-3-(2,2-bischloroethyl)-2,2-
dimethylcyclopropane carboxylate

Crop(s)                              Tol. (ppm) (See pages 1 and 2)

- Broccoli                          1
- Brussel sprouts                    1
- Cauliflower                       0.5
-Sweet corn                         0.1

- Corn, fodder, and forage          1.5

- Meat and meat by-products         0.2
- Sheep and goats                   0.2
- Horses and cattle                  0.2
- Fat of cattle, goats, sheep, horses
- and cattle                        2

MEXICAN TOLERANCIA

Residue:                                      

Crop Tolerancia (ppm)                      

none                                         

Essentially no use tolerances
**Pesticide:** Permethrin
**Substance Code:** CPR NO. none

**Codex Status:**

- [ ] No Codex Proposal
- [x] Step 6 or above

**Residue (if Step 9):**

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Limit (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None on milk or milk fat</td>
<td></td>
</tr>
</tbody>
</table>

**Canadian Limit**

- Residue:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Limit (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None on milk or milk fat</td>
<td></td>
</tr>
</tbody>
</table>

**Mexican Tolerance**

- Residue:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Tolerancia (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Proposed U.S. Tolerances**

- Residue: (3-phenoxypyphenyl)methyl (±) -
  - cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Tol. (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>0.1</td>
</tr>
<tr>
<td>Milk fat</td>
<td>2</td>
</tr>
</tbody>
</table>
INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL

CCPR NO.

PETITION NO. 9F2243/FAP9HS234
Reviewer: J. Onley

Codex Status

☑ No Codex Proposal Step 6 or above

Proposed U.S. Tolerances

Residue (if Step 9):

Residue: Pemethrin

Crop(s) Limit (mg/kg)

Crop(s) Tol. (ppm)

None on these commodities

Milk fat reflecting 0.3 ppm in whole milk
Tomato pomace 230

CANADIAN LIMIT

Residue:

None on these commodities

MEXICAN TOLERANCIA

Residue:

Crop Tolerancia (ppm)

Crop None

Notes:

Page 3 of 3
**INTERNATIONAL RESIDUE LIMIT STATUS**

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>PETITION NO. 9F2243/FAP49HS234</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reviewer: J. Onley</td>
</tr>
</tbody>
</table>

**Codex Status**

- No Codex Proposal Step 6 or above

**Residue (if Step 9):** Permethrin

**(sum of isomers)**

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Limit (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these commodities</td>
<td></td>
</tr>
</tbody>
</table>

**Proposed U.S. Tolerances**

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Tol. (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat of cattle, goats, hogs, horses and sheep</td>
<td>0.4</td>
</tr>
<tr>
<td>Meat of poultry</td>
<td>0.1</td>
</tr>
<tr>
<td>Meat by-product of cattle, goats, hogs, horses and sheep</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**CANADIAN LIMIT**

**Residue:**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Limit (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None on these commodities</td>
<td></td>
</tr>
</tbody>
</table>

**MEXICAN TOLERANCIA**

**Residue:**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Tolerancia (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
CHEMICAL: Permethrin

CCPR NO.: 120

Codex Status

\(\times\) No Codex Proposal Step 6 or above

PETITION NO.: GF2243/PAP49H5234
Reviewer: J. Onley

Proposed U.S. Tolerances

Residue (if Step 9): Permethrin
(sum of isomers)

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Limit (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lettuce</td>
<td>20</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>2</td>
</tr>
<tr>
<td>Eggs</td>
<td>None</td>
</tr>
<tr>
<td>Fat</td>
<td>None</td>
</tr>
<tr>
<td>Fat</td>
<td>None</td>
</tr>
</tbody>
</table>

Crop(s) | Tol. (ppm) |
--------|------------|
Lettuce | 20.0       |
Tomatoes| 1.5        |
Eggs    | 0.2        |
Fat of cattle, goats, hogs, horses, and sheep | 3.0 |
Fat & meat by-products of poultry | 0.5 |

CANADIAN LIMIT

Residue:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Limit (ppm)</th>
</tr>
</thead>
</table>

None on these commodities

MEXICAN TOLERANCIA

Residue:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Tolerancia (ppm)</th>
</tr>
</thead>
</table>

None

1/ These proposed Codex temporary MRL's are only at step 5 and are for Permethrin per se.

Notes:
CHEMICAL: Permethrin

PETITON NO 9F2247/9H5235

CCPR NO: None

Codex Status

| X | No Codex Proposal
|   | Step 6 or above

Residue (if Step 9):

Residue: Permethrin

Crops(s) Limit (mg/kg)

None

Proposals were made on other commodities by the 1979 JMPR

Crop(s) Tol. (ppm)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Limit (ppm)</th>
<th>Crop</th>
<th>Tolerancia (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>1</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Apples dried apple</td>
<td>2.5</td>
<td>dried apple pomace</td>
<td>65</td>
</tr>
<tr>
<td>pomace</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CANADIAN LIMIT

Residue: 3-phenoxycarbonyl

Residue: cis, trans 3-(2,2-dichlorovinyl)-

2,2-dimethylcyclopropane carboxylate

MEXICAN TOLERANCIA

Residue:

Notes:

Page 1 of 1
INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL: Permethrin

CTCP NO: None

Codex Status: ✔️ No Codex Proposal Step 6 or above

Residue (if Step 9): __________

Crop(s) Limit (mg/kg)

None

Proposal made by the 1979 JMPR for 0.05 ppm on Potatoes at or about the limit of detection.

CANADIAN LIMIT

Residue: 3-Phenoxybenzyl+ cis,trans-3-(2, 2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylate

Crop Limit (ppm)

Negligible: Residue of 0.1 ppm on potatoes

MEXICAN TOLERANCIA

Residue: __________

Crop Tolerancia (ppm)

None

Notes:

Page 1 of 1
### INTERNATIONAL RESIDUE LIMIT STATUS

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>Permethrin</th>
<th>PETITION NO.</th>
<th>1F2564</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCPR NO.</td>
<td></td>
<td>Reviewer J. Onley</td>
<td></td>
</tr>
</tbody>
</table>

**Codex Status**

- No Codex Proposal Step 6 or above

**Residue (if Step 9):**

- **isomers (metabolites excluded)**

<table>
<thead>
<tr>
<th>Crop(s)</th>
<th>Limit (mg/kg)¹/</th>
<th>Crop(s)</th>
<th>Tol. (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>0.1 (whole)</td>
<td>Milk</td>
<td>0.1</td>
</tr>
<tr>
<td>Poultry meats</td>
<td>0.1 (tol. applies)</td>
<td>Milk fat</td>
<td>2.</td>
</tr>
<tr>
<td>Eggs</td>
<td>0.1 to fat</td>
<td>Poultry</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eggs</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**CANADIAN LIMIT**

- Residue: 

- none (on above products)

**MEXICAN TOLERANCIA**

- Residue: 

- none

**Notes:** ¹/ see p. 1