Proposed Maximum Residue Limit

Pyriproxyfen

PMRL2016-31

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Under the authority of the *Pest Control Products Act*, Health Canada’s Pest Management Regulatory Agency (PMRA) is proposing to establish a maximum residue limit (MRL) for pyriproxyfen on tea (dried leaves) to permit the import and sale of foods containing such residues.

Pyriproxyfen is an insecticide currently registered in Canada for non-food use as a flea and tick control for domestic pets and as an insecticide in structural cracks and crevices, and for food use on greenhouse eggplants, cucumbers, tomatoes and peppers.

The PMRA must determine the quantity of residues that are likely to remain in or on the imported food commodities when pyriproxyfen is used according to label directions in the exporting country, and that such residues will not be a concern to human health. This quantity is then legally established as an MRL on the corresponding imported commodity. An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

Consultation on the proposed MRL for pyriproxyfen is being conducted via this document (see Next Steps, the last section of this document). A summary of the field trial data used to support the proposed MRL can be found in Appendix I.

To comply with Canada’s international trade obligations, consultation on the proposed MRL is also being conducted internationally by notifying the World Trade Organization, as coordinated by Canada’s Notification Authority and Enquiry Point.

The proposed MRL, to be added to the MRLs already established for pyriproxyfen, is as follows.

**Table 1   Proposed Maximum Residue Limit for Pyriproxyfen**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Residue Definition</th>
<th>MRL (ppm)</th>
<th>Food Commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyriproxyfen</td>
<td>2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy] pyridine</td>
<td>15</td>
<td>Tea (dried leaves)</td>
</tr>
</tbody>
</table>

1 ppm = parts per million

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum Residue Limits for Pesticides webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.
International Situation and Trade Implications

Table 2 compares the MRL proposed for pyriproxyfen in Canada with corresponding American tolerances and Codex MRLs.\(^1\) American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide. A listing of established Codex MRLs is available on the Codex Alimentarius Pesticide Residues in Food website, by pesticide or commodity.

Table 2  Comparison of Canadian MRLs, American Tolerances and Codex MRLs (where different)

<table>
<thead>
<tr>
<th>Food Commodity</th>
<th>Canadian MRL (ppm)</th>
<th>American Tolerance (ppm)</th>
<th>Codex MRL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea (dried leaves)</td>
<td>15</td>
<td>0.02(^1)</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

\(^1\) An action to revise the currently established American tolerance of 0.02 ppm on tea, dried leaves, to 15 ppm has been submitted to the US EPA.

Next Steps

The PMRA invites the public to submit written comments on the proposed MRL for pyriproxyfen up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRL will be legally in effect as of the date that it is entered into the Maximum Residue Limit Database.

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\(^1\) The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.
Appendix I

Summary of Field Trial Data Used to Support the Proposed Maximum Residue Limit

Japanese residue data for pyriproxyfen in/on tea leaves were submitted to support the maximum residue limit on imported tea from Japan.

Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for pyriproxyfen was based upon the residues observed in crop commodities treated according to label directions in the exporting country, and the guidance provided in the OECD MRL Calculator. Table A1 summarizes the residue data used to calculate the proposed MRL for imported tea.

Table A1  Summary of Field Trial and Processing Data Used to Support MRLs

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Application Method/ Total Application Rate (kg a.i./ha)</th>
<th>Preharvest Interval (days)</th>
<th>Lowest Average Field Trial Residues (ppm)</th>
<th>Highest Average Field Trial Residues (ppm)</th>
<th>Experimental Processing Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea, dried leaves</td>
<td>Foliar, ground spray/0.9</td>
<td>28-30</td>
<td>0.10</td>
<td>11.3</td>
<td>NA</td>
</tr>
</tbody>
</table>

1 kg a.i./ha = kilograms of active ingredient per hectare
NA = not applicable

Following the review of all available data, an MRL as proposed in Table 1 is recommended to cover residues of pyriproxyfen. Residues of pyriproxyfen in this imported crop commodity at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.