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Proposed Maximum Residue Limit

PMRL2020-03

Deltamethrin

(publié aussi en français)

4 February 2020

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

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ISSN: 1925-0835 (print)
1925-0843 (online)

Catalogue number: H113-24/2020-3E (print version)
H113-24/2020-3E-PDF (PDF version)

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Under the authority of the [Pest Control Products Act](#), Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of new uses on crop subgroup 6C to the product labels of Decis 5 EC Insecticide, containing technical grade deltamethrin, is acceptable. The specific uses approved in Canada are detailed on the labels of Decis 5 EC Insecticide (Prairie Provinces and Interior of British Columbia) and Decis 5 EC Insecticide (Eastern Canada and British Columbia), *Pest Control Products Act* Registration Numbers 17734 and 22478, respectively.

The evaluation of this deltamethrin application indicated that the end-use products have value and the human health and environmental risks associated with the new uses are acceptable.

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). 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 deltamethrin is being conducted via this document (see Next Steps). 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 MRLs is also being conducted internationally by notifying the [World Trade Organization](#), as coordinated by the [Canada's Notification Authority and Enquiry Point](#).

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

Table 1 Proposed Maximum Residue Limit for Deltamethrin

Common Name	Residue Definition	MRL (ppm) ¹	Food Commodity
Deltamethrin	cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)-, including the isomers cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)- and cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)-	0.07	Dried shelled pea and bean, except soybean (crop subgroup 6C)

¹ ppm = parts per million

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the [Residue Chemistry Crop Groups](#) webpage in the Pesticides and Pest Management section of the Canada.ca website.

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

MRLs may vary from one country to another for a number of reasons, including differences in pesticide use patterns and the locations of the crop field trials used to generate residue chemistry data.

Table 2 compares the MRL proposed for deltamethrin 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 Index](#) webpage, by pesticide or commodity.

Table 2 Comparison of Canadian MRL, American Tolerance and Codex MRL (where different)

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Crop subgroup 6C	0.07	Not established	1.0 (Pulses)

Next Steps

The PMRA invites the public to submit written comments on the proposed MRL for deltamethrin 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 MRL. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the [Maximum Residue Limit Database](#).

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

Residue data for deltamethrin in dry beans and dry peas were submitted to support the domestic use of Decis 5 EC Insecticide (Prairie Provinces and Interior of British Columbia) and Decis 5 EC Insecticide (Eastern Canada and British Columbia) on crop subgroup 6C.

Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for deltamethrin was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). Table A1 summarizes the residue data used to calculate the proposed MRL for crop subgroup 6C.

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

Commodity	Application Method/ Total Application Rate (g a.i./ha/season) ¹	Preharvest Interval (days)	Lowest Average Field Trial Residues (ppm)	Highest Average Field Trial Residues (ppm)
Dry beans	Foliar/29.4–30.6	6–8	<0.03	0.052
Dry peas	Foliar/29.6–30.3	6–7	<0.03	<0.03

¹ g a.i./ha = grams of active ingredient per hectare

Following the review of all available data, the MRL as proposed in Table 1 is recommended to cover total residues of deltamethrin. Total residues of deltamethrin in these crop commodities at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.