



Health  
Canada Santé  
Canada

Your health and  
safety... our priority.

Votre santé et votre  
sécurité... notre priorité.

Proposed Maximum Residue Limit

PMRL2019-23

# Cyclaniliprole

*(publié aussi en français)*

**29 August 2019**

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

Publications  
Pest Management Regulatory Agency  
Health Canada  
2720 Riverside Drive  
A.L. 6607 D  
Ottawa, Ontario K1A 0K9

Internet: [canada.ca/pesticides](http://canada.ca/pesticides)  
[hc.pmra.publications-arla.sc@canada.ca](mailto:hc.pmra.publications-arla.sc@canada.ca)  
Facsimile: 613-736-3758  
Information Service:  
1-800-267-6315 or 613-736-3799  
[hc.pmra.info-arla.sc@canada.ca](mailto:hc.pmra.info-arla.sc@canada.ca)

Canada 

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

Catalogue number: H113-24/2019-23E (print version)  
H113-24/2019-23E-PDF (PDF version)

**© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2019**

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Services and Procurement Canada, Ottawa, Ontario K1A 0S5.

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 various commodities and amendments to the currently registered uses on the product labels of Cyclaniliprole 50 SL Insecticide and Harvanta 50 SL Insecticide, containing technical grade cyclaniliprole, are acceptable. The specific uses approved in Canada are detailed on the labels of Cyclaniliprole 50 SL Insecticide and Harvanta 50 SL Insecticide, *Pest Control Products Act* Registration Numbers 32862 and 32889, respectively.

The evaluation of these cyclaniliprole applications 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 MRLs for cyclaniliprole is being conducted via this document (see Next Steps). A summary of the field trial data used to support the proposed MRLs 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 MRLs, to replace or be added to the MRLs already established for cyclaniliprole, are as follows.

**Table 1 Proposed Maximum Residue Limits for Cyclaniliprole**

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Cyclaniliprole	3-bromo- <i>N</i> -[2-bromo-4-chloro-6-[[[(1-cyclopropylethyl)amino]carbonyl] phenyl]-1-(3-chloro-2-pyridinyl)-1 <i>H</i> pyrazole-5-carboxamide	10	Leafy vegetables (crop group 4-13) <sup>2</sup>
		1.5	Bushberries (crop subgroup 13-07B)
		1.0	Small fruits vine climbing, except grapes (crop subgroup 13-07E) <sup>3</sup>
		0.8	Caneberries (crop subgroup 13-07A), <i>Brassica</i> head and stem vegetable group (crop group 5-13) <sup>4</sup>

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
		0.7	Stone fruits (crop group 12-09) <sup>5</sup>
		0.6	Grapes <sup>6</sup>
		0.4	Low growing berries, except lowbush blueberries, (crop subgroup 13-07G)
		0.1	Cucurbit vegetables (crop group 9) <sup>7</sup>
		0.02	Tree nuts (crop group 14-11) <sup>8</sup>
		0.01	Tuberous and corm vegetables (crop subgroup 1C)

<sup>1</sup> ppm = parts per million

<sup>2</sup> The MRL is proposed to replace the currently established MRL of 15 ppm.

<sup>3</sup> The MRL is proposed to replace the currently established MRL of 0.8 ppm.

<sup>4</sup> The MRL is proposed to replace the currently established MRL of 1.0 ppm.

<sup>5</sup> The MRL is proposed to replace the currently established MRL of 1.0 ppm.

<sup>6</sup> The MRL is proposed to replace the currently established MRL of 0.8 ppm.

<sup>7</sup> The MRL is proposed to replace the currently established MRL of 0.15 ppm.

<sup>8</sup> The MRL is proposed to replace the currently established MRL of 0.03 ppm.

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides 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

Cyclaniliprole is an active ingredient that is concurrently being registered in Canada and the United States for use on tuberous and corm vegetables (crop subgroup 1C), caneberries (crop subgroup 13-07A), bushberries, (crop subgroup 13-07B), small fruits vine climbing, except grapes (crop subgroup 13-07E) and low growing berries (crop subgroup 13-07G). The amendments to the use instructions on leafy vegetables (CG 4-13), *Brassica* head and stem vegetables (CG 5-13), fruiting vegetables (CG 8-09), cucurbit vegetables (CG 9), pome fruit (CG 11-09), stone fruit (CG 12-09), grapes and tree nuts (CG 14-11) are also concurrently being approved in Canada and the United States. The MRLs proposed for cyclaniliprole in Canada are the same as corresponding tolerances to be promulgated in the United States.

Once established, the American tolerances for cyclaniliprole will be listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide.

Currently, there are no Codex MRLs<sup>1</sup> listed for cyclaniliprole in or on any commodity on the Codex Alimentarius Pesticide Index webpage.

### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for cyclaniliprole 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 MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.

---

<sup>1</sup> 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 Limits

Residue data for cyclaniliprole in potatoes, raspberries, blueberries, fuzzy kiwifruits and strawberries were submitted to support the domestic use of Cyclaniliprole 50 SL Insecticide and Harvanta 50 SL Insecticide on tuberous and corm vegetables (crop subgroup 1C), caneberries (crop subgroup 13-07A), bushberries, (crop subgroup 13-07B), small fruits vine climbing, except grapes (crop subgroup 13-07E) and low growing berries (crop subgroup 13-07G). A processing study in treated potatoes was also reviewed to determine the potential for concentration of residues of cyclaniliprole into processed commodities. In addition, previously reviewed residue data from field trials conducted in/on leafy vegetables (CG 4-13), *Brassica* head and stem vegetables (CG 5-13), fruiting vegetables (CG 8-09), cucurbit vegetables (CG 9), pome fruit (CG 11-09), stone fruit (CG 12-09), grapes and tree nuts (CG 14-11) were reassessed based on the amendments to the use instructions.

### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for cyclaniliprole 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 MRLs for tuberous and corm vegetables (crop subgroup 1C), caneberries (crop subgroup 13-07A), bushberries, (crop subgroup 13-07B), small fruits vine climbing, except grapes (crop subgroup 13-07E) and low growing berries, except lowbush blueberries, (crop subgroup 13-07G); and to revise the existing MRLs for leafy vegetables (crop group 4-13), *Brassica* head and stem vegetable group (crop group 5-13), cucurbit vegetables (crop group 9), stone fruits (crop group 12-09), grapes and tree nuts (crop group 14-11) .

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

Commodity	Application Method/ Total Application Rate (g ai/ha) <sup>1</sup>	Preharvest Interval (days)	Lowest Average Field Trial Residues (ppm)	Highest Average Field Trial Residues (ppm)	Experimental Processing Factor
Potato tubers	Foliar broadcast spray / 180	6-7	<0.01	<0.01	No concentration in processed fractions
Head lettuce with wrapper leaves	Foliar broadcast spray / 180	1	0.051	2.102	Not required
Leaf lettuce leaves			0.181	2.254	
Spinach leaves			0.010	3.516	
Mustard green leaves			1.387	4.425	
Cabbage head	Foliar broadcast spray / 180	1	0.010	0.386	Not required
Broccoli head and stem			0.081	0.475	
Cantaloupe fruit	Foliar broadcast spray / 180	1	0.010	0.064	Not required
Cucumber fruit			0.010	0.018	
Summer squash fruit			0.010	0.034	
Peach fruit	Foliar broadcast spray / 240	7	0.017	0.153	Not applicable <sup>2</sup>
Plum fruit			0.014	0.073	
Sweet cherry fruit			0.076	0.256	
Tart cherry fruit			0.066	0.448	
Cherries (sweet and tart combined)			0.066	0.448	

<b>Commodity</b>	<b>Application Method/ Total Application Rate (g ai/ha)<sup>1</sup></b>	<b>Preharvest Interval (days)</b>	<b>Lowest Average Field Trial Residues (ppm)</b>	<b>Highest Average Field Trial Residues (ppm)</b>	<b>Experimental Processing Factor</b>
Raspberries	Foliar broadcast spray / 240	1	0.113	0.424	Not required
Highbush blueberries	Foliar broadcast spray / 240	1	0.079	0.810	Not required
Fuzzy kiwifruits	Foliar broadcast spray / 240	1	0.010	0.394	Not required
Strawberries	Foliar broadcast spray / 240	1	0.043	0.275	Not required
Grapes	Foliar broadcast spray / 240	7	0.019	0.408	Not applicable <sup>2</sup>
Almond nuts	Foliar broadcast spray / 240	30	0.010	0.011	Not required
Pecan nuts			0.010	0.010	

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

<sup>2</sup> The amendments to these use instructions did not warrant a reassessment of the processing studies.

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