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Proposed Maximum Residue Limit

PMRL2021-25

Sulfoxaflor

(publié aussi en français)

15 July 2021

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: H113-24/2021-25E (print version)
H113-24/2021-25E-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 various commodities to the product label of Closer Insecticide, containing technical grade sulfoxaflor, is acceptable. The specific uses approved in Canada are detailed on the label of Closer Insecticide, *Pest Control Products Act* Registration Number 30826.

The evaluation of these sulfoxaflor applications indicated that the end-use product has 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 sulfoxaflor 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 sulfoxaflor, are as follows.

Table 1 Proposed maximum residue limits for sulfoxaflor

Common name	Residue definition	MRL (ppm) ¹	Food commodity
Sulfoxaflor	<i>N</i> -[methyloxy[1-[6-(trifluoromethyl)-3-pyridinyl]ethyl]-λ ⁴ -sulfanylidene]cyanamide	2.0	Bushberries (crop subgroup 13-07B, except gooseberries) ^{2,3}
		1.5	Caneberries (crop subgroup 13-07A)
		0.7	Globe artichokes
		0.08	Quinoa
		0.01	Asparagus

¹ ppm = parts per million

² Gooseberries are excluded from this MRL action as a 2.0 ppm MRL is already established for this commodity.

³ The MRL is proposed to replace the currently established 0.7 ppm MRL for lingonberries and lowbush blueberries.

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

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 MRLs proposed for sulfoxaflor 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 MRLs, American Tolerances and Codex MRLs (where different)

Food commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Bushberries (crop subgroup 13-07B, except gooseberries)	2.0	2 (Bushberry subgroup 13-07B)	6 (Dried grapes (currants, raisins and sultanas)) ¹
Caneberries (crop subgroup 13-07A)	1.5	1.5	Not established.
Globe artichokes	0.7	0.7	Not established.
Quinoa	0.08	Not established.	Not established.
Asparagus	0.01	0.01	Not established.

¹ Currants are included in the bushberries crop subgroup (13-07B).

¹ The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Next steps

The PMRA invites the public to submit written comments on the proposed MRLs for sulfoxaflor 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.

Appendix I

Summary of field trial data used to support the proposed maximum residue limits

Residue data for sulfoxaflor in highbush blueberries, blackberries, raspberries, globe artichokes, and asparagus were submitted to support the domestic use of Closer Insecticide on bushberries, caneberries, globe artichokes, and asparagus. Previously reviewed residue data from field trials conducted in/on wheat were reassessed in the framework of this petition to support the domestic use of Closer Insecticide on quinoa. In addition, a processing study in treated wheat was reassessed to determine the potential for concentration of residues of sulfoxaflor into processed quinoa commodities.

Maximum residue limits

The recommendation for maximum residue limits (MRLs) for sulfoxaflor 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 bushberries, caneberries, globe artichokes, quinoa and asparagus.

Table A1 Summary of field trial and processing data used to support the MRLs

Commodity	Application method/Total application rate (g a.i./ha) ¹	Preharvest interval (days)	Lowest average field trial residues (ppm)	Highest average field trial residues (ppm)	Experimental processing factor
Highbush blueberries	Foliar/ 299–313	1	0.155	1.265	Not required
Blackberries	Foliar/ 302–304	1	0.277	0.744	Not required
Raspberries	Foliar/ 303–312	1	0.236	0.536	Not required
Globe artichokes	Foliar/ 301–306	3	0.179	0.260	Not required
Wheat	Foliar/ 98–104	12–16	<0.01	0.061	Wheat flour: 0.2x
Asparagus	Foliar/ 302–311	126–302	<0.01	<0.011	Not required

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

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of sulfoxaflor. Residues of sulfoxaflor 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.