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Proposed Maximum Residue Limit

PMRL2020-43

Indaziflam

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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 label amendment allowing grazing and haying of non-cropland vegetation immediately following one application of Esplanade SC Herbicide, containing indaziflam, is acceptable. The specific label amendment approved in Canada is detailed on the label of Esplanade SC Herbicide, *Pest Control Products Act* Registration Number 31333.

The evaluation of this indaziflam application 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 indaziflam 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 be added to the MRLs already established for indaziflam, are as follows.

Table 1 Proposed maximum residue limits for indaziflam

Common name	Residue definition	MRL (ppm) ¹	Food commodity
Indaziflam	<i>N</i> -[(1 <i>R</i> ,2 <i>S</i>)-2,3-dihydro-2,6-dimethyl-1 <i>H</i> -inden-1-yl]-6-(1-fluoroethyl)-1,3,5-triazine-2,4-diamine	0.15	Meat byproducts of cattle, goats, horses and sheep
		0.05	Fat of cattle, goats, horses and sheep
		0.01	Meat of cattle, goats, horses and sheep; milk

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

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. For livestock commodities, differences in MRLs can also be due to different livestock feed items and practices.

Table 2 compares the MRLs proposed for indaziflam in Canada with the corresponding American tolerances and Codex MRLs.¹ American tolerances are listed in the [Electronic Code of Federal Regulations](#), 40 CFR Part 180, by pesticide. Currently, there are no corresponding Codex MRLs listed for indaziflam in or on any commodity on the Codex Alimentarius [Pesticide Index](#) webpage.

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

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Meat byproducts of cattle, goats, horses and sheep	0.15	0.2	Not Established
Fat of cattle, goats, horses and sheep	0.05	0.07	Not Established

Next steps

The PMRA invites the public to submit written comments on the proposed MRLs for indaziflam 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](#).

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 limits

Residue data for indaziflam in/on grass forage and hay were submitted to support the label amendment of this active on the Esplanade SC Herbicide label. The amendment allows grazing and hay production immediately following one application on non-croplands for weed control. Residue data from field trials conducted in the United States were submitted to support the domestic use of Esplanade SC on non-cropland vegetation. Indaziflam was applied to pasture grass at the registered application rate, and harvested immediately following application according to label directions. In addition, a dairy cattle feeding study involving treated feed was reviewed to determine the potential for transfer of residues of indaziflam into ruminant commodities.

Maximum residue limits

The recommendation for maximum residue limits (MRLs) for indaziflam was based upon the submitted field trial data for pasture grass and the ruminant feeding study.

Table A1 Summary of field trial data used to support MRLs on animal commodities.

Commodity	Application method/Total application rate (g a.i./ha) ¹	Preharvest Interval (days)	Lowest average field trial residues ² (ppm)	Highest Average field trial residues ² (ppm)
Grass foliage	At green-up /	0	3.04	17.1
Grass hay	72–76	0–89	<0.01	20.4

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

² Combined residues of indaziflam and 1-fluoroethyl diaminotriazine (FDAT), expressed as parent equivalents.

Based on the dietary burden calculated using the residue data in Table A1, MRLs of 0.01 ppm in milk and meat of cattle, goats, horses and sheep; 0.05 ppm in fat of cattle, goats, horses and sheep; and 0.15 ppm in meat byproducts of cattle, goats, horses and sheep to cover residues of indaziflam are proposed.

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