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Proposed Maximum Residue Limit

PMRL2016-06

# Imazapyr

*(publié aussi en français)*

**29 March 2016**

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: H113-24/2016-6E (print version)  
H113-24/2016-6E-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 removal of the grazing and cutting for hay restriction to the product label of Arsenal PowerLine Herbicide, containing technical grade imazapyr, is acceptable. The specific uses approved in Canada are detailed on the label of Arsenal PowerLine Herbicide, *Pest Control Products Act* Registration Number 30203.

The evaluation of this imazapyr 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 MRL for imazapyr 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 the Canada's Notification Authority and Enquiry Point.

The proposed MRL, to replace the MRLs already established for imazapyr, is as follows.

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

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Imazapyr	2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1 <i>H</i> -imidazol-2-yl]-3-pyridinecarboxylic acid	0.3	Kidney <sup>2</sup> of cattle, goats, horses, and sheep

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

<sup>2</sup> The 0.05 ppm MRL currently established for meat byproducts of cattle, goats, horses and sheep will be revised to exclude kidney to accommodate the distinct kidney MRL. The 0.05 ppm MRL established for hog meat byproducts remains unchanged.

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 MRL proposed for imazapyr in Canada with corresponding American tolerance and Codex MRL.<sup>1</sup> 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 MRL, American Tolerance and Codex MRL (where different)**

<b>Food Commodity</b>	<b>Canadian MRL (ppm)</b>	<b>American Tolerance (ppm)</b>	<b>Codex MRL (ppm)</b>
Kidney of cattle, goats, horses and sheep	0.3	0.20	0.05 [edible offal, mammalian]

### Next Steps

The PMRA invites the public to submit written comments on the proposed MRL for imazapyr 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 MRL will be legally in effect as of the date that it is entered into the Maximum Residue Limit Database.

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<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 Limit

Residue data for imazapyr in grasses were submitted to support removal of the grazing and cutting for hay restriction to the product label of Arsenal PowerLine Herbicide (Registration Number 30203).

#### Maximum Residue Limit

Table A1 summarizes the supporting grass residue data.

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

Commodity	Application Method/ Total Application Rate (g a.i./ha) <sup>1</sup>	Preharvest Interval (days)	Minimum Residues (ppm)	Maximum Residues (ppm)
Grass forage	817.6-873.6	0.1	26.9	98
		7	0.59	12.2
		14	<0.5	10.6
		28	<0.5	6.41
Grass hay		0.1	64.5	277
		7	0.88	27.1
		14	0.51	19.6
		28	<0.5	8.56

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

Based on the dietary burden and residue data, the 0.05 ppm MRL currently established for meat byproducts of cattle, goats, horses and sheep will be revised to exclude kidney to accommodate the distinct kidney MRL. No changes are required to the remaining MRLs currently established for imazapyr in livestock commodities.

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