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Proposed Maximum Residue Limit

PMRL2019-34

# Bentazon

*(publié aussi en français)*

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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 alfalfa to the product labels of VIPER ADV containing technical grade bentazon and imazamox and BASAGRAN FORTE HERBICIDE, containing technical grade bentazon are acceptable. The specific uses approved in Canada are detailed on the labels of VIPER ADV and BASAGRAN FORTE HERBICIDE, *Pest Control Products Act* Registration Numbers 30626 and 22006, respectively.

The evaluation of these 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 bentazon 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 MRLs can be found in Appendix I. Residues of imazamox from these uses are covered by MRLs currently established for imazamox in animal commodities.

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 bentazon, are as follows.

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

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Bentazon	3-(1-methylethyl)-1 <i>H</i> -2,1,3-benzothiadiazin-4(3 <i>H</i> )-one 2,2-dioxide, including the metabolites 6-hydroxy-3-(1-methylethyl)-1 <i>H</i> -2,1,3-benzothiadiazin-4(3 <i>H</i> )-one 2,2-dioxide and 8-	0.4	Meat byproducts of cattle, goats, horses, and sheep
		0.06	Kidney of poultry

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
	hydroxy-3-(1-methylethyl)-1 <i>H</i> -2,1,3-benzothiadiazin-4(3 <i>H</i> )-one 2,2-dioxide	0.05	Eggs; fat and meat of cattle, goats, hogs, horses, and sheep; fat, meat, and meat byproducts of poultry (except kidney); meat byproducts of hogs
		0.02	Milk

<sup>1</sup> 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 bentazon in Canada with corresponding American tolerances and Codex MRLs.<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 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)
Meat byproducts of cattle, goats, horses, and sheep	0.4	0.05	Not established

<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.

<b>Food Commodity</b>	<b>Canadian MRL (ppm)</b>	<b>American Tolerance (ppm)</b>	<b>Codex MRL (ppm)</b>
Kidney of poultry	0.06	0.05	0.07 (Poultry, edible offal of)
Fat and meat of cattle, goats, hogs, horses, and sheep; meat byproducts of hogs; fat, meat, and meat byproducts of poultry (except kidney)	0.05	0.05	0.03 (Poultry meat)  0.07 (Poultry, edible offal of)
Eggs	0.05	0.05	0.01
Milk	0.02	0.02	0.01

### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for bentazon 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 bentazon in alfalfa were submitted to support the maximum residue limits on animal commodities. In addition, animal metabolism studies were re-assessed in the context of this petition.

#### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for bentazon was based upon the submitted field trial data and the calculation of the dietary burden and anticipated residues in animal commodities. Table A1 summarizes the alfalfa residue data reviewed in the context of this submission.

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

Commodity	Application Method/Total Application Rate (g a.i./ha) <sup>1</sup>	Preharvest Interval (days)	Lowest Average Field Trial Residues (ppm)	Highest Average Field Trial Residues (ppm)
Alfalfa forage	Foliar broadcast/ 1404–1542	18–23	<1.47	<10.2
Alfalfa hay	Foliar broadcast/ 1404–1542	18–23	<3.96	<32.6

<sup>1</sup> 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 bentazon. Residues of bentazon in animal commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.