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Proposed Maximum Residue Limit

PMRL2018-36

# Flonicamid

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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 flax, dry peas and Crop Group 18 - Nongrass Animal Feeds to the product label of Beleaf 50SG Insecticide containing technical grade flonicamid, is acceptable. The specific uses approved in Canada are detailed on the label of Beleaf 50SG Insecticide, *Pest Control Products Act* Registration Number 29796.

The evaluation of these flonicamid 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 flonicamid 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.

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 flonicamid, are as follows.

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

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Flonicamid	<i>N</i> -(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide, including the metabolites 4-trifluoromethylnicotinic acid, 4-trifluoromethylnicotinamide and <i>N</i> -(4-trifluoromethylnicotinoyl)glycine	3.0	Dry field peas, dry lentils, dry pigeon peas
		1.5	Flaxseeds
	<i>N</i> -(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide, including the metabolites 4-trifluoromethylnicotinic acid	0.4 <sup>2</sup>	Meat byproducts of cattle, goats, horses and sheep
		0.15	Eggs; meat of cattle, goats, horses and sheep <sup>3</sup> ; milk <sup>3</sup>
		0.08	Meat and meat byproducts of hogs

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
	and 4-trifluoromethylnicotinamide	0.07	Meat and meat byproducts of poultry
		0.05	Fat of poultry
		0.04 <sup>4</sup>	Fat of cattle, goats, horses and sheep
		0.03	Fat of hogs

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

<sup>2</sup> This MRL is proposed to replace the currently established MRL of 0.08 ppm in/on meat byproducts of horses, cattle, sheep and goats.

<sup>3</sup> This MRL is proposed to replace the currently established MRL of 0.08 ppm in/on meat of horses, cattle, sheep and goats and of 0.03 ppm in/on milk.

<sup>4</sup> This MRL is proposed to replace the currently established MRL of 0.03 ppm in/on fat of sheep, goats, cattle and horses.

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 flonicamid in Canada with corresponding American tolerances. American tolerances are 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 flonicamid for the proposed food commodities or for any edible livestock commodity on the Codex Alimentarius Pesticide Residues in Food and Feed website.

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

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)
Dry field peas, dry lentils, dry pigeon peas	3.0	3.0  (Pea and bean, dried shelled, except soybean, subgroup 6C)

<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>
Flaxseeds	1.5	1.5 (Rapeseed subgroup 20A)
Meat byproducts of cattle, goats, horses and sheep	0.4	0.08
Meat of cattle, goats, horses and sheep	0.15	0.08
Milk	0.15	0.05
Eggs	0.15	0.04
Meat and meat byproducts of hogs	0.08	0.03
Meat and meat byproducts of poultry	0.07	0.03
Fat of poultry	0.05	0.03
Fat of cattle, goats, horses and sheep	0.04	0.03
Fat of hogs	0.03	0.03

### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for flonicamid 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 flonicamid in canola and dry peas were submitted to support the domestic use of Beleaf 50SG Insecticide (PCP #29796) on flax and dry peas. In addition, a processing study in treated canola was reviewed to determine the potential for concentration of residues of flonicamid into processed commodities.

### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for flonicamid 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 dry peas and flaxseed.

**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)	Lowest Average Field Trial Residues (ppm)	Highest Average Field Trial Residues (ppm)	Experimental Processing Factor
Canola	Foliar broadcast/ 293-305	6-8	<0.8	1.044	Canola Oil (parent only): 0.1×
Dry peas	Foliar broadcast/ 295-308	6-8	<0.04	1.065	Not required

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

Based on the dietary burden and residue data, MRLs as proposed in Table 1 are recommended to cover residues of flonicamid in animal commodities.

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