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Proposed Maximum Residue Limit

PMRL2015-54

# Flumioxazin

*(publié aussi en français)*

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Publications  
Pest Management Regulatory Agency  
Health Canada  
2720 Riverside Drive  
A.L. 6607 D  
Ottawa, Ontario K1A 0K9

Internet: [pmra.publications@hc-sc.gc.ca](mailto:pmra.publications@hc-sc.gc.ca)  
[healthcanada.gc.ca/pmra](http://healthcanada.gc.ca/pmra)  
Facsimile: 613-736-3758  
Information Service:  
1-800-267-6315 or 613-736-3799  
[pmra.infoserv@hc-sc.gc.ca](mailto:pmra.infoserv@hc-sc.gc.ca)

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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 spring wheat and dry chickpeas to the product labels of Flumioxazin 51WDG Herbicide and Valtera Herbicide, containing technical grade flumioxazin, is acceptable. The specific uses approved in Canada are detailed on the labels of Flumioxazin 51WDG Herbicide and Valtera Herbicide, *Pest Control Products Act* Registration Numbers 29235 and 29230, respectively.

The evaluation of these flumioxazin 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 MRL for flumioxazin 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 be added to the MRLs already established for flumioxazin, is as follows.

**Table 1 Proposed Maximum Residue Limit<sup>1</sup> for Flumioxazin**

Common Name	Residue Definition	MRL (ppm) <sup>2</sup>	Food Commodity
Flumioxazin	2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl-1-yl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-indole-1,3(2H)-dione	0.02	Wheat grain

<sup>1</sup> An MRL of 0.05 ppm is already established for dry chick peas

<sup>2</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.

Table 2 compares the MRL proposed for flumioxazin 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. Currently, there are no Codex MRLs listed for flumioxazin in or on any commodity on the Codex Alimentarius Pesticide Residues in Food webpage.

**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>
Wheat grain	0.02	0.40	None

### Next Steps

The PMRA invites the public to submit written comments on the proposed MRL for flumioxazin 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 flumioxazin in spring wheat were submitted to support the domestic use of Flumioxazin 51WDG Herbicide and Valtera Herbicide on spring wheat. Previously reviewed residue data from field trials conducted in/on dry field peas and dry beans were reassessed in the framework of this petition to support the domestic use of Flumioxazin 51WDG Herbicide and Valtera Herbicide on dry chickpeas. In addition, a processing study in treated wheat was to determine the potential for concentration of residues of flumioxazin into processed commodities.

### Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for flumioxazin 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 MRL for spring wheat.

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

Commodity	Application Method/ Total Application Rate (g ai/ha) <sup>1</sup>	Preharvest Interval (days)	Maximum Residues (ppm)	Minimum Residues (ppm)	Experimental Processing Factor
Spring wheat grain	Soil application 5-8 days prior to planting/ 102.7-109.5	98-133	<0.02	<0.02	0.14 (flour) 0.94 (bran) 1.0 (germ)

<sup>1</sup> g ai/ha = grams of active ingredient per hectare

Based on the dietary burden and residue data, no MRLs for flumioxazin are proposed in milk, eggs, fat, meat and meat by-products of cattle, goats, hogs, horses, poultry and sheep.

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