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Proposed Maximum Residue Limit

PMRL2014-54

# Pyraflufen-ethyl

*(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 granted conditional registration to technical grade pyraflufen-ethyl and the end-use product NUP6D 04 Herbicide for use in Canada on field corn, soybeans and wheat (spring, durum and winter). The specific uses approved in Canada are detailed on the product label of NUP6D 04 Herbicide, Pest Control Products Act Registration Number 31258.

The evaluation of these pyraflufen-ethyl applications indicated that the end-use product has merit and 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 pyraflufen-ethyl 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 Standards Council of Canada.

The proposed MRLs for pyraflufen-ethyl are as follows.

**Table 1 Proposed Maximum Residue Limits for Pyraflufen-ethyl**

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Pyraflufen-ethyl	Ethyl 2-[2-chloro-5-[4-chloro-5-(difluoromethoxy)-1-methyl-1 <i>H</i> -pyrazol-3-yl]-4-fluorophenoxy]acetate and metabolite acetic acid, 2-[2-chloro-5-[4-chloro-5-(difluoromethoxy)-1-methyl-1 <i>H</i> -pyrazol-3-yl]-4-fluorophenoxy]-	0.02	Eggs; fat, meat and meat byproducts of cattle, goats, hogs, horses, poultry and sheep; milk
		0.01	Dry soybeans; field corn; wheat

<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**

The MRLs proposed for pyraflufen-ethyl in Canada are the same as corresponding American tolerances as 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 pyraflufen-ethyl in or on any commodity on the Codex Alimentarius Pesticide Residues in Food webpage.

## **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for pyraflufen-ethyl 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.

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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 MRLs

Residue data from field trials conducted in the United States, including growing regions representative of Canadian zones, were submitted to support the domestic use of NUP6D 04 Herbicide on field corn, soybeans and wheat. Pyraflufen-ethyl was applied to field corn, soybeans and wheat according to label directions or at exaggerated rates. In addition, processing studies in treated field corn, soybeans and wheat were reviewed to determine the potential for concentration of residues of pyraflufen-ethyl into processed commodities.

### Maximum Residue Limit(s)

The recommendation for maximum residue limits (MRLs) for pyraflufen-ethyl 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 soybeans, field corn and wheat.

**Table A1 Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)**

Commodity	Application Timing/ Total Application Rate (g a.i./ha)	Preharvest Interval (days)	Combined Residues <sup>1</sup> (ppm)		Experimental Processing Factor
			Min	Max	
Field corn grain	Preplant/ 10	140-152	<0.01	<0.01	Could not be determined as residues were not quantifiable in grain and processed commodities
	Preplant/ 1.8 + Postemergence/ 1.8	86-120	<0.01	<0.01	
Soybean seed	Preplant/ 10	121-140	<0.01	<0.01	Could not be determined as residues were not quantifiable in seed and processed commodities
	Preplant/ 1.8 + Postemergence/ 1.8	64-105	<0.01	<0.01	
Wheat grain	Preplant/ 10	96-225	<0.01	<0.01	Could not be determined as residues were not quantifiable in grain and processed commodities
	Preplant/ 1.8 + Postemergence/ 1.8	56-69	<0.01	<0.01	
	Postemergence/ 1.8	76-113	<0.01	<0.01	

<sup>1</sup> Combined residues of pyraflufen-ethyl and acid metabolite E-1.

Based on the dietary burden and residue data, MRLs of 0.02 ppm in eggs, milk, and fat, meat and meat by-products of cattle, goats, hogs, horses, poultry and sheep to cover residues of pyraflufen-ethyl and metabolite E-1 are also proposed.

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