



Health  
Canada Santé  
Canada

Your health and  
safety... our priority.

Votre santé et votre  
sécurité... notre priorité.

Proposed Maximum Residue Limit

PMRL2018-26

# Pyroxasulfone

*(publié aussi en français)*

**18 July 2018**

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

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

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

Canada 

ISSN: 1925-0835 (print)  
1925-0843 (online)

Catalogue number: H113-24/2018-26E (print version)  
H113-24/2018-26E-PDF (PDF version)

**© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2018**

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Services and Procurement Canada, Ottawa, Ontario K1A 0S5.

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 Crop Subgroup 20B (Sunflowers subgroup) to the product label of Pyroxasulfone 85 WG Herbicide, containing technical grade pyroxasulfone, is acceptable. The specific uses approved in Canada are detailed on the label of Pyroxasulfone 85 WG Herbicide, *Pest Control Products Act* Registration Number 30572.

The evaluation of this pyroxasulfone 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 pyroxasulfone is being conducted via this document (see Next Steps). 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 pyroxasulfone, is as follows.

**Table 1 Proposed Maximum Residue Limit for Pyroxasulfone**

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Pyroxasulfone	3-[(5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)pyrazol-4-yl)methylsulfonyl]-4,5-dihydro-5,5-dimethyl-1,2-oxazole, and the metabolites [5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1 <i>H</i> -pyrazol-4-yl]methanesulfonic acid; 5-difluoromethoxy-1-methyl-3-trifluoromethyl-1 <i>H</i> -pyrazole-4-carboxylic acid; [5-(difluoromethoxy)-3-(trifluoromethyl)-1 <i>H</i> -pyrazol-4-yl]methanesulfonic acid; and 3-[1-carboxy-2-(5,5-dimethyl-4,5-dihydroisoxazol-3-ylthio)ethylamino]-3-oxopropanoic acid (expressed as parent equivalents)	0.3	Sunflowers (Revised) (Crop Subgroup 20B)

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

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides and Pest Management section of Health Canada's website.

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 MRL proposed for pyrooxasulfone in Canada is the same as the corresponding American tolerance 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 pyrooxasulfone in or on any commodity on the Codex Alimentarius Pesticide Index webpage.

### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for pyrooxasulfone 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.

---

<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 Limits

Residue data for pyroxasulfone in sunflowers were submitted to support the domestic use of Pyroxasulfone 85 WG Herbicide on Crop Subgroup 20B (Sunflowers subgroup). In addition, a processing study in treated sunflowers was reviewed to determine the potential for concentration of residues of pyroxasulfone into processed commodities.

#### Maximum Residue Limit

The recommendation for the maximum residue limit (MRL) for pyroxasulfone 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 Crop Subgroup 20B.

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

<b>Commodity</b>	<b>Application Method/ Total Application Rate (g a.i./ha)<sup>1</sup></b>	<b>Preharvest Interval (days)</b>	<b>Lowest Average Field Trial Residues (ppm)</b>	<b>Highest Average Field Trial Residues (ppm)</b>	<b>Experimental Processing Factor</b>
Sunflower seed	Postemergent foliar broadcast / 295-310	57-64	<0.115	0.156	No quantifiable residues were observed at exaggerated rates

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

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