# **Proposed Maximum Residue Limit**

PMRL2013-30

# Cyazofamid

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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 various commodities to the product label of Ranman<sup>TM</sup> 400SC Agricultural Fungicide, containing technical grade cyazofamid, is acceptable. The specific uses approved in Canada are detailed on the label of Ranman<sup>TM</sup> 400SC Agricultural Fungicide, Pest Control Products Act Registration 27984.

The evaluation of these cyazofamid 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 cyazofamid 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, to be added to the MRLs already established for cyazofamid, are as follows.

Table 1 Proposed Maximum Residue Limits for Cyazofamid

Common Name	Residue Definition	MRL (ppm)	Food Commodity
Cyazofamid	4-chloro-2-cyano- <i>N</i> , <i>N</i> -dimethyl-5-(4-methylphenyl)-1 <i>H</i> -imidazole-1-	90	Dried basil leaves
	sulfonamide, including the metabolite 4-chloro-5-(4-methylphenyl)-1 <i>H</i> -imidazole-2-carbonitrile	30	Fresh basil leaves
imic		10	Leafy greens (Crop Subgroup 4A)
		0.5	Edible-podded runner beans, edible-podded snap beans, edible-podded wax beans, edible-podded moth beans,

Common Name	Residue Definition	MRL (ppm)	Food Commodity
			edible-podded yardlong beans, edible-podded jackbeans, and edible-podded sword bean
		0.08	Succulent shelled blackeyed peas, succulent shelled cowpeas, succulent shelled lima beans, succulent shelled southern peas, and succulent shelled broad beans
		0.02	Head and stem <i>Brassica</i> Subgroup (Crop Subgroup 5A), bell peppers, non-bell peppers

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 pesticide(s) or for food commodity(ies).

#### **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 field crop trials used to generate residue chemistry data.

Table 2 compares the MRLs proposed for cyazofamid in Canada with corresponding American tolerances. Currently, there are no Codex MRLs<sup>1</sup> established for cyazofamid in or on any commodity on the Codex Alimentarius Pesticide Residues in Food webpage. American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide.

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The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs

<b>Food Commodity</b>	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Head and stem  Brassica Subgroup  (Crop Subgroup 5A)	0.02	1.2 (Brassica, head and stem, subgroup 5A)	Not Established
Bell peppers, non- bell peppers	0.02	0.9 (Vegetable, fruiting, group 8-10)	Not Established

#### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for cyazofamid 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 1

#### Summary of Field Trial Data Used to Support the Proposed Maximum Residue Limits

Residue data from supervised trials conducted in Canada and/or the United States on ediblepodded snap beans, succulent shelled lima beans, spinach, head lettuce, leaf lettuce, field-grown basil and greenhouse-grown basil were submitted to support the domestic use of Ranman<sup>TM</sup> 400SC Agricultural Fungicide on these crops. In these trials, cyazofamid was applied to snap beans, lima beans, head lettuce and leaf lettuce according to label directions. In the trials conducted on field basil and greenhouse basil, these crops were treated with cyazofamid at exaggerated rates, and harvested at the proposed preharvest interval (PHI). For spinach, cyazofamid was applied at the proposed rate but harvested at a shorter PHI than proposed.

In addition, to support the domestic use of Ranman<sup>TM</sup> 400SC Agricultural Fungicide as a drench to seeds immediately after seeding in the greenhouse of bell pepper, non-bell pepper, lettuce, and crops included in the Head and stem Brassica Subgroup (Crop Subgroup 5A) intended for transplant outdoors, a metabolism study, a confined crop rotation trial study, and the chemical/physical/environmental properties of cyazofamid were assessed.

#### **Maximum Residue Limits**

The recommendation for maximum residue limits (MRLs) for cyazofamid was based upon the submitted field trial data, and the use of the OECD MRL Calculator as the MRL statistical methodology. Table A1 summarizes the data used to calculate the proposed MRLs.

TABLE A1 **Summary of Field Trial Data Used to Support Maximum Residue Limits** 

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		
			Min	Max	
Dried basil leaves* (field grown)	Foliar application/ 777–808	0	10	45	
Fresh basil leaves  (field and greenhouse grown)	Foliar application/ 777–808	0	2.34	15	
Edible-podded snap beans	Foliar application/ 477–568	0	0.02	0.23	
Succulent shelled lima beans	Foliar application/ 479–586	0	0.02	0.06	
Head lettuce	Foliar application/ 471–567	0	0.06	2.0	
Leaf lettuce	Foliar application/ 479–658	0	0.49	4.6	

TABLE A1 **Summary of Field Trial Data Used to Support Maximum Residue Limits** 

Commodity	Application Method/	PHI	Residues (ppm)	
Spinach	Foliar application/	0	1.48	6.62
	389-410			

<sup>\*</sup> Fresh basil leaves and stems were harvested at a 0-day PHI, and then dried for 1-3 days under ambient conditions, or using an oven or forced air dryer. ppm = parts per million

Following the review of all available data, MRLs are recommended as indicated in Table 1 to cover residues from the use of cyazofamid on the crops listed. Residues of cyazofamid in these commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.