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Proposed Maximum Residue Limit

PMRL2014-68

# Pendimethalin

*(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 concluded that the addition of the new use on carrots to the product label of Prowl H2O Herbicide, containing technical grade pendimethalin, is acceptable. The specific use approved in Canada is detailed on the label of Prowl H2O Herbicide, *Pest Control Products Act* Registration Number 29542.

The evaluation of this pendimethalin application indicated that the end-use product has merit and value and the human health and environmental risks associated with the new use 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 pendimethalin 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 Standards Council of Canada.

The proposed MRL, to be added to the MRLs already established for pendimethalin, is as follows.

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

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Pendimethalin	N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine including the metabolite benzenemethanol, 4-[(1-ethylpropyl)amino]-2-methyl-3,5-dinitro-	0.5	Carrot roots

<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 MRL proposed for pendimethalin 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 pendimethalin 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 MRL for pendimethalin 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 MRL

Residue data from field trials conducted in Canada were submitted to support the domestic use of Prowl H2O Herbicide on carrots. Pendimethalin was applied to carrots at or below the labelled rate, which were harvested according to the proposed label directions.

#### Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for pendimethalin in/on carrots was based on submitted field trial data, and the guidance provided in the MRL Calculator Statistical White Paper (March 1, 2011). Table A1 summarizes the residue data used to calculate the proposed MRL for carrots.

**Table A1      Summary of Field Trial Data Used to Support the Maximum Residue Limit (MRL)**

Commodity	Application Method/ Total Application Rate (kg a.i./ha)	Preharvest Interval (days)	Residues (ppm)	
			Min	Max
Carrots	Pre-emergent soil application to muck soil + post-emergent application / 3.0	70	<0.10	<0.109
	Pre-emergent soil application to mineral soil + post-emergent application / 2.23-2.69	14-75	<0.10	<0.10

Following the review of all available data, an MRL of 0.5 ppm is recommended to cover residues of pendimethalin and its metabolite CL 202,347. Residues of pendimethalin in/on carrot roots at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.