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Proposed Maximum Residue Limit

PMRL2021-11

# 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 new uses on transplanted celery to the product label of Prowl H<sub>2</sub>O Herbicide, containing technical grade pendimethalin, is acceptable. The specific uses approved in Canada are detailed on the label of Prowl H<sub>2</sub>O Herbicide, *Pest Control Products Act* Registration Number 29542.

The evaluation of this pendimethalin 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 pendimethalin 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 1.

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 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-	0.2	Celery

<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

A new use on celery is concurrently being registered in Canada and the United States for pendimethalin. 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 pendimethalin in Canada with the 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. A listing of established Codex MRLs is available on the Codex Alimentarius [Pesticide Index](#) webpage, by pesticide or commodity.

**Table 2 Comparison of the Canadian MRL, American Tolerance and Codex MRL**

Food commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Celery	0.2	0.2 (Leaf petiole vegetable subgroup 22B)	0.09

## 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 maximum residue limit

Residue data for pendimethalin in celery were submitted to support the domestic use of Prowl H<sub>2</sub>O Herbicide on transplanted celery.

#### Maximum residue limit

The recommendation for the maximum residue limit (MRL) for pendimethalin 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 celery.

**Table A1 Summary of field trial data used to support the MRL**

Commodity	Application method/ Total application rate (g a.i./ha) <sup>1</sup>	Preharvest interval (days)	Lowest average field trial residues (ppm)	Highest average field trial residues (ppm)
Celery (mineral soil)	Broadcast/ 3321-3549	52-61	<0.10	<0.103
Celery (muck soil)	Broadcast/ 4189-4298	58-62	<0.10	<0.105

<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 pendimethalin. Residues of pendimethalin in celery at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.