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Proposed Maximum Residue Limit

PMRL2017-17

# Clethodim

*(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 various commodities to the product labels of Centurion® Emulsifiable Concentrate Post-Emergence Herbicide and Select® Emulsifiable Concentrate Post-Emergence Herbicide, containing technical grade clethodim, is acceptable. The specific uses approved in Canada are detailed on the labels of Centurion® Emulsifiable Concentrate Post-Emergence Herbicide and Select® Emulsifiable Concentrate Post-Emergence Herbicide, *Pest Control Products Act Registration Numbers* 27598 and 22625 respectively.

The evaluation of this clethodim 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 clethodim 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 Canada's Notification Authority and Enquiry Point.

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

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

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Clethodim	2-[1-[[[(2E)-3-chloro-2-propen-1-yl]oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one, including metabolites containing the 2-cyclohex-1-enone moiety	3.5	Dry shelled peas and beans (crop subgroup 6C) <sup>2</sup>

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

<sup>2</sup> The MRL of 3.5 ppm is proposed to replace the currently established 0.5 ppm MRL for beans, dry peas, dry chickpeas and dry lentils.

**Note:** In the context of this Proposed Maximum Residue Limit (PMRL) consultation document on clethodim, PMRA is taking the opportunity to update the historical terms of “beans”, currently listed on the Maximum Residue Limits for Pesticides webpage, for the preferred terms currently used for edible podded beans and succulent shelled beans.

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**

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 MRLs proposed for clethodim in Canada with corresponding American tolerances and Codex MRLs.<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 Residues in Food and Feed website, by pesticide or commodity.

**Table 2 Comparison of the Canadian MRL, American Tolerance and Codex MRL (where different)**

<b>Food Commodity</b>	<b>Canadian MRL (ppm)</b>	<b>American Tolerance (ppm)</b>	<b>Codex MRL (ppm)</b>
Dry shelled peas and beans	3.5	3.5	2.0

### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRL for clethodim 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 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 Maximum Residue Limit

Previously reviewed residue data from field trials conducted in/on dry peas and lentils were reassessed in the framework of this petition.

#### Maximum Residue Limit

The recommendation for a maximum residue limit (MRL) for clethodim was based upon the previously submitted field trial data, and the guidance provided in the OECD MRL Calculator. Table A1 summarizes the residue data used to calculate the revised/proposed MRL for dry shelled peas and beans.

**Table A1 Summary of Field Trial and Processing Data Used to Support 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)	Experimental Processing Factor
Dry peas	Foliar / 90	37-75	0.05	1.10	Not applicable
Lentils	Foliar / 90	58-91	<0.02	0.26	Not applicable

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

Following the review of all available data, an MRL as proposed in Table 1 is recommended to cover residues of clethodim and its metabolites containing the 2-cyclohex-1-enone moiety, expressed as clethodim. Residues of clethodim in crop subgroup 6C – dry shelled peas and beans at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.