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Proposed Maximum Residue Limit

PMRL2013-87

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 cranberries to the product labels of Centurion EC Herbicide and Select EC Herbicide, containing technical grade clethodim, is acceptable. The specific uses approved in Canada are detailed on the labels of Centurion EC Herbicide and Select EC Herbicide, *Pest Control Products Act* Registration Numbers 27598 and 22625, respectively.

The evaluation of these clethodim applications indicated that the end-use products have 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 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 MRLs can be found in Appendix 1.

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 replace or be added to the MRLs already established for clethodim, are as follows.

Table 1 Proposed Maximum Residue Limits for Clethodim

Common Name	Residue Definition	MRL (ppm)	Food Commodity
Clethodim	(<i>E,E</i>)-(±)-2-[1-[(3-chloro-2-propenyl)oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one, including metabolites containing the 2-cyclohex-1-enone moiety	0.5	Cranberries, bearberries, bilberries, cloudberrries, lingonberries ^a , muntries, partridgeberries

ppm = parts per million

^a Proposed to replace the currently established MRL of 0.2 ppm (EMRL2012-17)

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 field crop trials used to generate residue chemistry data.

Table 2 compares the MRLs proposed for clethodim in Canada with corresponding American tolerances and Codex MRLs.¹ 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 website, by pesticide or commodity.

**Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs
(where different)**

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Cranberries, bearberries, bilberries, cloudberries, lingonberries, muntries, partridgeberries	0.5	0.2 for Bushberry subgroup 13-07B (includes lingonberries) 0.5 for Cranberry	Not Established

Next Steps

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

¹ 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 MRLs

Residue data from supervised residue trials conducted in the United States were submitted to support the domestic use of Centurion EC Herbicide and Select EC Herbicide on cranberries. Clethodim was applied to cranberries at exaggerated rates, and harvested according to label directions.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for clethodim was based upon the submitted field trial data, and the use of the OECD MRL Calculator as the MRL statistical methodology. Table A.1 summarizes the data used to calculate the proposed MRL for cranberries. As cranberry is the representative crop for the Low growing berry (except strawberry) subgroup (Crop Subgroup 13-07H), MRLs are also being proposed for all crops in this subgroup, except lowbush blueberries for which an MRL is already established.

TABLE A.1 Summary of Field Trial Data Used to Support Maximum Residue Limits (MRLs)

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)	
			Min	Max
Cranberries	Foliar application/ 551–614 g a.i./ha	29–30	0.13	0.32

PHI = preharvest interval; ppm = parts per million

Following the review of all available data, an MRL of 0.5 ppm is recommended to cover residues of clethodim in/on cranberries, bearberries, bilberries, cloudberries, lingonberries, muntries, and partridgeberries. Residues of clethodim 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.