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Proposed Maximum Residue Limit

PMRL2015-29

# Prohexadione calcium

*(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 strawberries to the product label of Apogee® Plant Growth Regulator, containing technical grade prohexadione calcium, is acceptable. The specific uses approved in Canada are detailed on the label of Apogee® Plant Growth Regulator, *Pest Control Products Act* Registration Number 28042.

The evaluation of this prohexadione calcium 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 specified as a maximum residue limit (MRL). A 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 prohexadione calcium 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 Canada's Notification Authority and Enquiry Point.

The proposed MRLs, to be added to the MRLs already established for prohexadione calcium, are as follows.

**Table 1 Proposed Maximum Residue Limits for Prohexadione calcium**

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Prohexadione calcium	Calcium 3,5-dioxo-4-(1-oxopropyl)cyclohexanecarboxylate	0.3	Crop Subgroup 13-07G (Low growing berry)

<sup>1</sup> 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 established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.

## **International Situation and Trade Implications**

Prohexadione calcium is an active ingredient that is concurrently being registered for use on strawberries in Canada and the United States. The MRL proposed for prohexadione calcium in/on strawberries in Canada is the same as corresponding tolerance to be promulgated in the United States. Canada is also proposing MRLs for all the other commodities in the low growing berry subgroup (Crop Subgroup 13-07G), however the United States will not be promulgating a crop subgroup tolerance.

Once established, the American tolerance for prohexadione calcium will be 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 prohexadione calcium in or on any commodity on the Codex Alimentarius Pesticide Residues in Food website.

## **Next Steps**

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

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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 Limits

Residue data from field trials conducted in Canada and the United States were submitted to support the domestic use of Apogee® Plant Growth Regulator on strawberries. Prohexadione calcium was applied at the proposed rate to strawberries, which were harvested according to label directions.

#### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for prohexadione calcium 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 MRLs for Crop Subgroup 13-07G (low growing berry) commodities.

**Table A1      Summary of Field Trial and Processing Data Used to Support MRLs**

Commodity	Application Method/ Total Application Rate (g a.i./ha) <sup>1</sup>	Preharvest Interval (days)	Minimum Residues (ppm)	Maximum Residues (ppm)
Strawberries	Foliar/ 111 – 116	16 – 25	0.03	0.16

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

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of prohexadione calcium. Residues of prohexadione calcium in these crop commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.