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Proposed Maximum Residue Limit

PMRL2018-31

# Diquat

*(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 revision of the established MRLs on dried shelled pea and bean, except soybean (crop subgroup 6C), is acceptable. The specific uses approved in Canada are detailed on the labels of Reglone Dessicant and Reglone Ion, Pest Control Products Act Registration Numbers 26396 and 31058, respectively.

The evaluation of this diquat application indicated that the end-use products have value and the human health and environmental risks associated with these 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 diquat 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 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 Canada's Notification Authority and Enquiry Point.

The proposed MRL, to replace the MRL already established for diquat, is as follows.

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

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Diquat	6,7-dihydrodipyrido[1,2-a:2',1'-c]pyrazinediium	0.9 <sup>2</sup>	Dried shelled pea and bean, except soybean (crop subgroup 6C)

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

<sup>2</sup> This MRL is proposed to replace the currently established MRL of 0.2 ppm for all dried beans and peas listed in the MRL database.

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides section of the Canada.ca 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 MRL proposed for diquat in Canada with corresponding American tolerance 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 Index webpage, by pesticide or commodity.

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

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Dried shelled pea and bean, except soybean (crop subgroup 6C)	0.9	Not Established	0.2 (Dry beans, dry lentils)  0.3 (Dry peas)

## Next Steps

The PMRA invites the public to submit written comments on the proposed MRL for diquat 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 diquat in dry peas, chickpeas, lentils and dry beans were submitted to support the maximum residue limit on dried shelled pea and bean, except soybean (crop subgroup 6C).

#### Maximum Residue Limit

The recommendation for the maximum residue limit (MRL) for diquat 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 dried shelled pea and bean, except soybean (crop subgroup 6C).

**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)
Dry Peas	Foliar / 479-514	3-5	0.015	0.130
Chickpea	Foliar / 468-527	4-5	0.070	0.575
Lentils	Foliar / 470-508	4-5	0.052	0.500
Dry Beans	Foliar / 481-526	4-5	<0.01	0.350

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