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Proposed Maximum Residue Limit

PMRL2019-07

# Dithianon

*(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) is proposing to establish maximum residue limits (MRLs) for dithianon on various commodities to permit the import and sale of foods containing such residues.

Dithianon is a fungicide not currently registered for use in Canada.

The PMRA must determine the quantity of residues that are likely to remain in or on the imported food commodities when dithianon is used according to label directions in the exporting country, and that such residues will not be a concern to human health. This quantity is then legally established as an MRL on the corresponding imported commodity. 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 dithianon is being conducted via this document (see Next Steps). 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 for dithianon are as follows.

**Table 1 Proposed Maximum Residue Limits for Dithianon**

Common Name	Residue Definition	MRL (ppm) <sup>1</sup>	Food Commodity
Dithianon	5,10-dihydro-5,10-dioxonaphtho[2,3-b]-1,4-dithiin-2,3-dicarbonitrile	300	Hops (dried)
		12	Raisins
		8.0	Grapes, pears
		5.0	Apples
		3.0	Sweet cherries, tart cherries
		0.5	Plums

<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

Table 2 compares the MRLs proposed for dithianon 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 Index webpage, 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)
Apples	5	5 (pome fruit)	1 (pome fruits)
Pears	8		
Cherries (sweet and tart)	3	Not established	2 (stone fruits)
Plums	0.5	Not established	
Grapes	8	3	5 (wine grapes) 2 (table grapes)
Raisins	12	Not established	3.5
Hops (dried)	300	100	300

### Next Steps

The PMRA invites the public to submit written comments on the proposed MRLs for dithianon 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 for dithianon in apples, pears, sweet and tart cherries, plums, grapes and hops were submitted to support the maximum residue limits on imported apples, pears, cherries, plums, grapes and hops. In addition, processing studies in treated apples, plums, cherries, grapes and hops were reviewed to determine the potential for concentration of residues of dithianon into processed commodities.

#### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for dithianon was based upon the residues observed in crop commodities treated according to exaggerated rates in the exporting country, and the guidance provided in the OECD MRL Calculator. Table A1 summarizes the residue data used to calculate the proposed MRLs for imported apples, pears, cherries, plums, grapes and hops.

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

Commodity	Application Method/ Total Application Rate (kg a.i./ha) <sup>1</sup>	Preharvest Interval (days)	Minimum Residues (ppm)	Maximum Field Trial Residues (ppm)	Experimental Processing Factor
Apples	Foliar broadcast/ 5.6-7.4	21	0.11	1.90	No concentration in processed fractions
Pears	Foliar broadcast/ 13.6-22.3	21	1.71	3.67	Not required
Cherries (sweet and tart)	Foliar broadcast/ 1.5-1.6	13-14	0.08	1.50	No concentration in processed fractions
Plums	Foliar broadcast/ 0.63-0.70	14-15	<0.02	0.13	No concentration in processed fractions
Grapes	Foliar broadcast/ 3.5-4.5	41-43	0.25	7.36	Raisins: 1.6×
Hops (dried)	Foliar broadcast/ 10.0-12.1	14	4.1	95.5	No concentration in processed fractions

<sup>1</sup> kg a.i./ha = kilograms of active ingredient per hectare

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