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Proposed Maximum Residue Limit

PMRL2013-70

Propiconazole

(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 propiconazole in or on various commodities to permit the import and sale of foods containing such residues.

Propiconazole is a fungicide registered for use in Canada on a number of cereals, fruits, legumes and vegetables.

The PMRA has determined the quantity of residues that are likely to remain in or on the imported food commodities when propiconazole is used according to label directions in the exporting country. The Agency has also determined that such residues will not be a concern to human health and is proposing to legally establish corresponding MRLs. 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 propiconazole 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 the Standards Council of Canada.

The proposed MRLs, to replace or be added to the MRLs already established for propiconazole, are as follows.

Table 1 Proposed Maximum Residue Limits for Propiconazole

Common Name	Residue Definition ¹	MRL (ppm)	Food Commodity
Propiconazole	1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1 <i>H</i> -1,2,4-triazole	1000	Citrus oil
		8.0	Citrus fruits (Crop Group 10-Revised)
		4.0	Stone fruits (Crop Group 12, except plums) ^a ; Tea (dried leaves)
		3.0	Tomatoes

ppm = parts per million

^a The MRL is proposed to replace the currently established 1.0 ppm MRL for apricots, cherries, nectarines and peaches.

¹ The current residue definition for all commodities captured as "1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1*H*-1,2,4-triazole, including all metabolites containing the 2,4-dichlorophenyl moiety" is being revised given that propiconazole alone is adequate for enforcement purposes.

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* (PCPA), both for pesticides or for food commodities.

International Situation and Trade Implications

Refer to Table 2 for a comparison, where different, of the Canadian MRLs and American tolerances for propiconazole. American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide. Currently, Codex MRL² (Codex MRLs searchable by pesticide or commodity) have not been established for propiconazole in/on citrus fruits, stone fruits and tomatoes and tea.

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

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)
Plums	1.0	0.60
Tea (dried leaves)	4.0	None

Next Steps

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

² 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 post-harvest trials for propiconazole on citrus fruits, stone fruits and tomatoes and tea were submitted to support the maximum residue limits (MRLs) on these imported commodities. In addition, a processing study in treated oranges was submitted and reviewed to determine the potential for concentration of residues of propiconazole into processed commodities.

Maximum Residue Limit(s)

The recommendation for MRLs for propiconazole was based upon the residues observed in crop commodities treated according to label directions or at exaggerated rates in the exporting country. Table A.1 summarizes the residue data used to calculate the proposed MRLs.

Table A.1 Summary of Residue and Processing Data Used to Support Maximum Residue Limit(s) (MRLs).

Commodity	Application Method/ Total Appl. Rate	PHI (days)	Residues (ppm)		Experimental Processing Factor
			Min	Max	
Orange	Post-Harvest Dip/ 0.80405-0.80743 lb a.i. per 100 gallons	0	0.77	5.66	No concentration in orange juice; 1.4× in orange dried pulp; 185x in orange oil
	Post-Harvest Spray/ 0.81752-0.82761 lb a.i. per 250,000 lb fruit	0	1.03	2.32	
Grapefruit	Post-Harvest Dip/ 0.80405-0.80768 lb a.i. per 100 gallons	0	0.90	0.144	
	Post-Harvest Spray/ 0.82437 lb a.i. per 250,000 lb fruit	0	1.19	1.41	
Lemon	Post-Harvest Dip/ 0.80405 lb a.i. per 100 gallons	0	1.92	3.19	185x in orange oil
	Post-Harvest Spray/ 0.82131-0.82622 lb a.i. per 250,000 lb fruit	0	0.92	1.14	
Peach	Post-Harvest Dip/ 0.11252-0.11285 lb a.i./100 gallons	0	0.73	2.52	Not required
	Post-Harvest Spray/ 0.11365-0.11861 lb a.i./200,000 pound fruit	0	0.13	0.56	

Commodity	Application Method/	PHI	Residues (ppm)		Experimental
Plum	Post-Harvest Dip/ 0.11265 lb a.i./100 gallons	0	0.11	0.22	Not required
	Post-Harvest Spray/ 0.11384-0.11596 lb a.i./200,000 pound fruit	0	0.13	0.40	
Cherry	Post-Harvest Dip/ 0.11244-0.11265 lb a.i./100 gallons	0	0.65	2.23	Not required
	Post-Harvest Spray/ 0.11208 lb a.i./25,000 pound fruit	0	0.16	0.24	
Tomato	Post-Harvest Dip or Drench/ 0.2246-0.2249 lb a.i./100 gallons	0	0.331	1.52	Not required
	Post-Harvest Spray/ 0.2250-0.2256 lb a.i./25,000 pound fruit	0	0.284	1.76	
Tea	Foliar Spray/ 100 g a.i./ha	7	0.42	1.8	No concentration

PHI = preharvest interval

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of propiconazole. Residues of propiconazole 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.