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Proposed Maximum Residue Limit

PMRL2013-32

# Cyprodinil

*(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 various commodities to the product label of SWITCH<sup>®</sup> 62.5 WG Fungicide, containing technical grade cyprodinil and fludioxonil, is acceptable. The specific uses approved in Canada are detailed on the label of SWITCH<sup>®</sup> 62.5 WG Fungicide, Pest Control Products Act Registration Number 28189. MRL consultation for the fludioxonil present in SWITCH<sup>®</sup> 62.5 WG Fungicide is being conducted under a separate action.

The evaluation of this cyprodinil application indicated that the end-use product has 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 cyprodinil 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 cyprodinil, are found in the following table.

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

<b>Common Name</b>	<b>Residue Definition</b>	<b>MRL (ppm)</b>	<b>Food Commodity</b>
Cyprodinil	4-cyclopropyl-6-methyl- <i>N</i> -phenyl-2-pyrimidinamine	50 <sup>a</sup>	Leafy Greens Subgroup (Crop Subgroup 4A)
		1.5 <sup>b</sup>	Fruiting Vegetable Group (Crop Group 8-09)

ppm = parts per million

<sup>a</sup> The recommended MRL of 50 ppm will replace the established MRL of 30 ppm for amaranth, arugula, corn salad, dandelion leaves, dock, edible leaved chrysanthemum, endives, fresh chervil leaves, fresh parsley leaves, garden cress, garden purslane, garland chrysanthemum, head lettuce, leaf lettuce, orach leaves, radicchio, upland cress, and winter purslane (EMRL2008-26). The recommended MRL of 50 ppm will also replace the established MRL of 35 ppm for fresh parsley leaves (EMRL2012-25).

<sup>b</sup> The recommended MRL of 1.5 ppm will replace the established MRL of 0.45 ppm for tomatillos and tomatoes, and the established MRL of 1.0 ppm for tomato paste (EMRL2012-25).

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 pesticide(s) or for food commodity(ies).

### **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 cyprodinil 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 Residues in Food website, by pesticide or commodity.

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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.

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

<b>Food Commodity</b>	<b>Canadian MRL (ppm)</b>	<b>American Tolerance (ppm)</b>	<b>Codex MRL (ppm)</b>
Leafy Greens Subgroup (Crop Subgroup 4A)	50	50	10 (Lettuce, head; lettuce, leaf)
Fruiting Vegetable Group (Crop Group 8-09)	1.5	1.5 (Vegetable, fruiting, group 8-10)	0.5 (Peppers, sweet (including pimento or pimiento))
			0.5 (Tomato)
			0.2 (Eggplant)

**Next Steps**

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



## Appendix I

### Summary of Field Trial Data Used to Support the Proposed MRLs

Residue data from supervised residue trials conducted with cyprodinil at exaggerated rates on spinach, peppers (field- and greenhouse-grown), and non-bell peppers (field- and greenhouse-grown) in the United States and Canada were submitted to support the domestic use of SWITCH<sup>®</sup> 62.5 WG Fungicide on spinach, field peppers, and greenhouse peppers. In addition, previously reviewed residue data from field trials conducted in/on head lettuce, leaf lettuce, and tomatoes were reassessed in the framework of this petition. A processing study in treated tomato was also reassessed to determine the potential for concentration of residues of cyprodinil into processed commodities.

#### Maximum Residue Limit(s)

The recommendation for maximum residue limits (MRLs) for cyprodinil was based upon the submitted field trial data and the use of the OECD MRL Calculator as the MRL statistical methodology. Table A1 summarizes the data used to calculate the proposed MRLs.

**Table A1 Summary of Field Trial and Processing Data Used to Support Maximum Residue Limit(s) (MRLs)**

Commodity	Application Method/ Total Application Rate (kg a.i./ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor
			Min	Max	
Spinach	Foliar/ 1.46-1.53	0	4.58	36.9	Not applicable
Head Lettuce (with wrapper leaves)	Broadcast/ 1.46	7	1.62	20.5	
Leaf Lettuce	Broadcast/ 1.46	7	8.27	25	
Bell peppers and non-bell peppers (field and greenhouse grown)	Broadcast/ 1.49-1.59	0	0.023	0.697	
Tomato	Foliar/ 1.45-1.52	0	0.01	0.36	
Tomato	Foliar/ 1.01	0	0.244	0.249	Tomato (RAC)
			0.121	0.133	0.5X (Puree)
			0.554	0.556	2.3X (Paste)

Following the review of all available data, MRLs of 50 ppm and 1.5 ppm are recommended to cover residues of cyprodinil in/on Leafy Greens Subgroup (Crop Subgroup 4A) and Fruiting Vegetable Group (Crop Group 8-09), respectively. Residues of cyprodinil 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.