

Proposed Maximum Residue Limit

PMRL2013-14

S-metolachlor

(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 peanuts to the product label of DUALTM MAGNUM[®] Herbicide and DUAL II MAGNUM[®] Herbicide, containing technical grade S-metolachlor, is acceptable. The specific uses approved in Canada are detailed on the label of DUALTM MAGNUM[®] Herbicide and DUAL II MAGNUM[®] Herbicide, Pest Control Products Act Registration Numbers 25728 and 25729, respectively.

The evaluation of these S-metolachlor applications indicated that the end-use products have 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 MRL for S-metolachlor 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 I.

To comply with Canada's international trade obligations, consultation on the proposed MRL is also being conducted internationally by notifying the World Trade Organization, as coordinated by the Standards Council of Canada.

The proposed MRL, to be added to the MRLs already established for S-metolachlor, is as follows.

Common Name	Residue Definition	MRL (ppm)	Food Commodity
S-metolachlor	2-chloro- <i>N</i> -(2-ethyl-6-methylphenyl)- <i>N</i> -[(1 <i>S</i>)- 2-methoxy-1-methylethyl)acetamide and 2- chloro- <i>N</i> -(2-ethyl-6-methylphenyl)- <i>N</i> -[(1 <i>R</i>)-2- methoxy-1-methylethyl)acetamide, including the metabolites 2-[(2-ethyl-6- methylphenyl)amino]-1-propanol and 4-(2- ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3- morpholinone	0.2	Peanuts

Table 1 Proposed Maximum Residue Limits for S-metolachlor

ppm = parts per million

Maximum residue limits (MRLs) established in Canada may be found using the Maximum Residue Limit Database, accessible via 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

The MRL proposed for S-metolachlor in Canada is the same as the corresponding American tolerance as listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide. Currently, there are no Codex MRLs¹ listed for S-metolachlor in or on any commodity on the Codex Alimentarius Pesticide Residues in Food webpage.

Next Steps

The PMRA invites the public to submit written comments on the proposed MRL for S-metolachlor 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 they are entered into the Maximum Residue Limit Database.

¹ 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 MRL

Residue data from supervised residue trials conducted with S-metolachlor at exaggerated rates on peanuts in the US were submitted to support the domestic use of DUALTM MAGNUM[®] Herbicide and DUAL II MAGNUM[®] Herbicide on peanuts. In addition, a processing study in treated peanuts was reviewed to determine the potential for concentration of residues of S-metolachlor into peanut processed commodities.

Maximum Residue Limit(s)

The recommendation for a maximum residue limit (MRL) for S-metolachlor was based upon the submitted field trial data, and the use of the OECD MRL Calculator as the MRL statistical methodology. Residues of s-metolachlor in peanut refined oil are covered by the proposed MRL for the raw agricultural commodity (RAC) as residues did not concentrate when peanuts treated with s-metolachlor were processed into this commodity. Table A1 summarizes the data used to calculate the proposed MRL for peanuts, and the processing data.

Table A1Summary of Field Trial and Processing Data Used to Support Maximum
Residue Limit (MRL)

Commodity	Application Method/ Total Application Rate (kg a.i./ha)	PHI (days)	Residues (ppm)		Experimental
			Min	Max	Processing Factor
Peanut nutmeats	Pre-plant incorporated+ broadcast/ 2.98	86-91	<0.08	<0.09	Not applicable
Peanut nutmeats	Broadcast/	124	< 0.08	<0.08	
Refined Peanut Oil	6.8		<0.08		1X
Peanut nutmeats	Broadcast/	124	0.15	0.18	
Refined Peanut Oil	20.2		<0.08		0.5X
Peanut nutmeats	Broadcast/	124	0.16	0.42	
Refined Peanut Oil	33.6		<0.08		0.3X

Following the review of all available data, an MRL of 0.2 ppm is recommended to cover residues of s-metolachlor. Residues of s-metolachlor in refined peanut oil are covered by the MRL of 0.2 ppm recommended for the RAC. Residues of s-metolachlor in peanuts and refined peanut oil at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.