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Established Maximum Residue Limit

EMRL2008-28

Spinetoram

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Under the authority of the [Pest Control Products Act](#), Health Canada's Pest Management Regulatory Agency (PMRA) has granted conditional registration to technical grade spinetoram and the end-use products Radiant SC Insecticide and Delegate WG Insecticide for use in Canada on root vegetables (Crop Subgroup 1A), leafy vegetables (Crop Group 4), cole crops (Crop Group 5), fruiting vegetables (Crop Group 8), pome fruits (Crop Group 11), stone fruits (Crop Group 12), caneberries (Crop Subgroup 13-07A), bushberries (Crop Subgroup 13-07B), asparagus, barley, beet greens, grapes, oats, okra, rye, soybeans, strawberries, turnip greens and wheat. See Appendix I for a list of crop group/subgroup commodities. The specific uses approved in Canada are detailed on the labels of Radiant SC Insecticide and Delegate WG Insecticide, *Pest Control Products Act* Registration Numbers 28777 and 28778, respectively.

Corresponding domestic maximum residue limits (MRLs) for spinetoram were proposed in the consultation document published on 28 April 2008, Proposed Maximum Residue Limit [PMRL2008-11](#), *Spinetoram*. The PMRL also included proposed import MRLs for spinetoram on tuberous and corm vegetables (Crop Subgroup 1C), leaves of root and tuber vegetables (Crop Group 2), legume vegetables (Crop Group 6), cucurbit vegetables (Crop Group 9), citrus fruits (Crop Group 10), corn (field, sweet, pop) and cranberries to permit the import and sale of food containing these residues. See Appendix I for a list of crop group/subgroup commodities. The PMRA received no comments in response to this consultation.

To comply with Canada's international trade obligations, consultation on the proposed MRLs was also conducted internationally by notifying the World Trade Organization, as coordinated by the Standards Council of Canada. No comments were received as a result of the World Trade Organization consultation.

Established Maximum Residue Limits for Spinetoram

Common Name	Residue Definition	MRL (ppm)	Food Commodity
Spinetoram	<p>XDE-175-J: <i>1H-as-indaceno[3,2-d]oxacyclododecin-7,15-dione, 2-[(6-deoxy-3-O-ethyl-2,4-di-O-methyl-α-L-mannopyranosyl)oxy]-13-[[2<i>R</i>,5<i>S</i>,6<i>R</i>)-5-(dimethylamino)tetrahydro-6-methyl-2<i>H</i>-pyran-2-yl]oxy]-9-ethyl-2,3,3a,4,5,5a,5b,6,9,10,11,12,13,14,16a,16b-hexadecahydro-14-methyl-(2<i>R</i>,3<i>aR</i>,5<i>aR</i>,5<i>bS</i>,9<i>S</i>,13<i>S</i>,14<i>R</i>,16<i>aS</i>,16<i>bR</i>)</i></p> <p>XDE-175-L: <i>1H-as-indaceno[3,2-d]oxacyclododecin-7,15-dione, 2-[(6-deoxy-3-O-ethyl-2,4-di-O-methyl-α-L-mannopyranosyl)oxy]-13-[[2<i>R</i>,5<i>S</i>,6<i>R</i>)-5-(dimethylamino)tetrahydro-6-methyl-2<i>H</i>-pyran-2-yl]oxy]-9-ethyl-2,3,3a,5a,5b,6,9,10,11,12,13,14,16a,16b-tetradecahydro-4,14-dimethyl-, (2<i>S</i>,3<i>aR</i>,5<i>aS</i>,5<i>bS</i>,9<i>S</i>,13<i>S</i>,14<i>R</i>,16<i>aS</i>,16<i>bS</i>)</i></p> <p>Includes the following metabolites:</p> <p>N-demethyl-175 J: <i>(2<i>R</i>,3<i>aR</i>,5<i>aR</i>,5<i>bS</i>,9<i>S</i>,13<i>S</i>,14<i>R</i>,16<i>aS</i>,16<i>bR</i>)-9-ethyl-14-methyl-13-[[2<i>S</i>,5<i>S</i>,6<i>R</i>)-6-methyl-5-(methylamino)tetrahydro-2<i>H</i>-pyran-2-yl]oxy]-7,15-dioxo-2,3,3a,4,5,5a,5b,6,7,9,10,11,12,13,14,15, 16a,16b-octadecahydro-1<i>H</i>-as-indaceno[3,2-d]oxacyclododecin-2-yl 6-deoxy-3-O-ethyl-2,4-di-O-methyl-alpha-L-mannopyranoside</i></p> <p>N-formyl-175-J: <i>(2<i>R</i>,3<i>S</i>,6<i>S</i>)-6-({(2<i>R</i>,3<i>aR</i>,5<i>aR</i>,5<i>bS</i>,9<i>S</i>,13<i>S</i>,14<i>R</i>,16<i>aS</i>,16<i>bR</i>)-2-[(6-deoxy-3-O-ethyl-2,4-di-O-methyl-α-L-mannopyranosyl)oxy]-9-ethyl-14-methyl-7,15-dioxo-2,3,3a,4,5,5a,5b,6,7,9,10,11,12,13,14,15,16a,16b-octadecahydro-1<i>H</i>-as-indaceno[3,2-d]oxacyclododecin-13-yl}oxy)-2-methyltetrahydro-2<i>H</i>-pyran-3-yl(methyl)formamide</i></p>	7.0	Leafy <i>Brassica</i> greens (Crop Subgroup 5B), leafy vegetables (Crop Group 4), leaves of root and tuber vegetables (Crop Group 2)
		3.0	Citrus oil
		2.0	Head and stem <i>Brassica</i> vegetables (Crop Subgroup 5A)
		1.0	Grape juice
		0.7	Low growing berries (Crop Subgroup 13-07G; except lowbush blueberries, cranberries), raisins
		0.5	Caneberries (Crop Subgroup 13-07A), bushberries (Crop Subgroup 13-07B; except highbush cranberries, lingonberries)
		0.4	Small fruit vine climbing, except fuzzy kiwifruit (Crop Subgroup 13-07F; except gooseberries)
		0.3	Cucurbit vegetables (Crop Group 9), citrus fruits (Crop Group 10), edible-podded legume vegetables (Crop Subgroup 6A)
		0.2	Fruiting vegetables (Crop Group 8), stone fruits (Crop Group 12), okra
		0.1	Pome fruits (Crop Group 11), root vegetables (Crop Subgroup 1A), barley, oats, rye, wheat
0.04	Tuberous and corm vegetables (Crop Subgroup 1C), succulent shelled pea and bean (Crop Subgroup 6B), dried shelled pea and bean (Crop Subgroup 6C), asparagus, corn (field, sweet, pop), cranberries, dry soybeans		

Common Name	Residue Definition	MRL (ppm)	Food Commodity
		7.5	Milk, fat
		5.5	Fat of cattle, goats, horses and sheep
		0.85	Liver of cattle, goats, horses and sheep
		0.6	Meat byproducts (except liver) of cattle, goats, horses and sheep
		0.3	Milk
		0.2	Meat of cattle, goats, horses and sheep
		0.04	Eggs; fat, meat and meat byproducts of hogs and poultry

MRLs for the listed crop groupings are established for each commodity included in the group or subgroup in accordance with Appendix I.

A complete list of all MRLs established in Canada can be found on the PMRA's [MRL webpage](#).

Appendix I

Crop Groups: Numbers and Definitions

Crop Group or Subgroup Number	Name of Crop Group/Subgroup	Food Commodities Included in the Crop Group or Subgroup
1A	Root and tuber vegetables/ Root vegetables	Black salsify roots Carrot roots Celeriac roots Chicory roots Edible burdock roots Garden beet roots Ginseng roots Horseradish roots Oriental radish roots Parsnip roots Radish roots Rutabaga roots Salsify roots Skirret roots Spanish salsify roots Sugar beet roots Turnip roots Turnip-rooted chervil roots Turnip-rooted parsley roots
1C	Root and tuber vegetables/ Tuberous and corm vegetables	Arracacha Arrowroot Cassava roots Chayote roots Chinese artichokes Chufa Edible canna Ginger roots Jerusalem artichokes Lerens Potatoes Sweet potato roots Tanier corms Taro corms True yam tubers Turmeric roots Yam bean roots

Crop Group or Subgroup Number	Name of Crop Group/Subgroup	Food Commodities Included in the Crop Group or Subgroup
2	Leaves of root and tuber vegetables	Black salsify tops Cassava leaves Celeriac tops Chicory tops Edible burdock tops Garden beet tops Oriental radish tops Radish tops Rutabaga tops Tanier leaves Taro leaves Turnip tops Turnip-rooted chervil tops
4	Leafy vegetables except <i>Brassica</i>	Amaranth Arugula Cardoon Celery Celtuce Chinese celery Corn salad Dandelion leaves Dock Edible leaved chrysanthemum Endives Fresh chervil leaves Fresh Florence fennel leaves and stalk Fresh parsley leaves Garden cress Garden purslane Garland chrysanthemum Head lettuce Leaf lettuce New Zealand spinach Orach leaves Radicchio Rhubarb Spinach Swiss chard Upland cress Vine spinach Winter purslane
5A	<i>Brassica</i> (cole) leafy vegetables/ Head and stem <i>Brassica</i>	Broccoli Brussels sprouts Cabbages Cauliflower Chinese broccoli Chinese mustard cabbages Kohlrabi Napa Chinese cabbages

Crop Group or Subgroup Number	Name of Crop Group/Subgroup	Food Commodities Included in the Crop Group or Subgroup
5B	<i>Brassica</i> (cole) leafy vegetables/ Leafy <i>Brassica</i> greens	Bok choy Chinese cabbages Broccoli raab Collards Kale Mustard greens Mustard spinach Rape greens
6A	Legume vegetables/ Edible-podded legume vegetables	Edible-podded dwarf peas Edible-podded jackbeans Edible-podded moth beans Edible-podded peas Edible-podded pigeon peas Edible-podded runner beans Edible-podded snap beans Edible-podded snow peas Edible-podded soybeans Edible-podded sugar snap peas Edible-podded swordbeans Edible-podded wax beans Edible-podded yardlong beans
6B	Legume vegetables/ Succulent shelled peas and beans	Succulent shelled blackeyed peas Succulent shelled broad beans Succulent shelled English peas Succulent shelled garden peas Succulent shelled green peas Succulent shelled lima beans Succulent shelled peas Succulent shelled pigeon peas Succulent shelled southern peas

Crop Group or Subgroup Number	Name of Crop Group/Subgroup	Food Commodities Included in the Crop Group or Subgroup
6C	Legume vegetables/ Dried shelled peas and beans (except soybean)	Dry adzuki beans Dry beans Dry blackeyed peas Dry broad beans Dry catjang seed Dry chickpeas Dry field peas Dry guar seed Dry kidney beans Dry lablab beans Dry lentils Dry lima beans Dry moth beans Dry mung beans Dry navy beans Dry pigeon peas Dry pink beans Dry pinto beans Dry rice beans Dry southern peas Dry tepary beans Dry urd beans Grain lupin
8	Fruiting vegetables	Bell peppers Eggplants Groundcherries Non-bell peppers Pepinos Pepper hybrids Tomatillos Tomatoes
9	Cucurbit vegetables	Balsam apples Balsam pears Cantaloupes Chayote fruit Chinese cucumbers Chinese waxgourds Citron melons Cucumbers Edible gourds (other than those listed in this item) Muskmelons (other than those listed in this item) Pumpkins Summer squash Watermelons West Indian gherkins Winter squash

Crop Group or Subgroup Number	Name of Crop Group/Subgroup	Food Commodities Included in the Crop Group or Subgroup
10	Citrus fruits	Calamondins Citrus citron Citrus hybrids Grapefruits Kumquats Lemons Limes Oranges Pummelos Satsuma mandarins Tangerines
11	Pome fruits	Apples Crabapples Loquats Mayhaws Oriental pears Pears Quinces
12	Stone fruits	Apricots Nectarines Peaches Plumcots Plums Prune plums Sweet cherries Tart cherries
13-07A	Berries and small fruits/ Caneberries	Blackberries Loganberries Raspberries (red and black) Wild raspberries Cultivars, varieties and hybrids of above commodities

Crop Group or Subgroup Number	Name of Crop Group/Subgroup	Food Commodities Included in the Crop Group or Subgroup
13-07B	Berries and small fruits/ Bushberries (Highbush cranberries and lingonberries are excluded from the proposed Subgroup MRL)	Aronia berries Buffalo currants Chilean guavas Currants (red and black) Elderberries European barberry Gooseberries Highbush blueberries Highbush cranberries Honeysuckle Huckleberries Jostaberries Lingonberries Lowbush blueberries Native currants Salal berries Saskatoon berries (juneberries) Sea buckthorn Cultivars, varieties and hybrids of above commodities
13-07F	Berries and small fruits/ Small fruits vine climbing, except fuzzy kiwifruit (Gooseberries are excluded from the proposed Subgroup MRL)	Amur river grapes Gooseberries Grapes Hardy kiwifruit Maypop Schizandra berries Cultivars, varieties and hybrids of above commodities
13-07G	Berries and small fruits/ Low growing berries (Lowbush blueberries and cranberries are excluded from the proposed Subgroup MRL)	Bearberries Bilberries Cloudberries Cranberries Lingonberries Lowbush blueberries Muntries Partridgeberries Strawberries Cultivars, varieties and hybrids of above commodities