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Protéger la santé
humaine et l'environnement

Proposed Maximum Residue Limit

PMRL2026-03

Isocycloseram

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Purpose of consultation

Maximum residue limits (MRLs)¹ are being proposed for the pesticide isocycloseram as part of the following applications for the major new Canadian uses, under submission numbers 2021-3041, 2021-3042, 2021-3046, 2021-3047.

Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) is proposing acceptability of the major new uses requested under the above-noted applications to register the end-use products A21377 CP, A21708 CP, A22466 CP and A22725 ST for new uses on various commodities in Canada, to control various insects (please refer to Table 1). The MRLs for the uses requested under the related submissions 2021-3038, 2021-3045 and 2021-3048 were consulted upon in PMRL2025-21.

The evaluation of these isocycloseram applications indicated that the end-use products have value, and the human health and environmental risks associated with their proposed uses are acceptable. Details regarding these applications can be found in Proposed Registration Decision PRD2026-02, *Isocycloseram, A21377 CP, A21708 CP, A22466 CP, EQUENTO RFC and A23294 TO*, posted to the Pesticides and pest management portion of Canada.ca on 29 January 2026. Dietary risks from the consumption of foods listed in Table 1 were shown to be acceptable when isocycloseram is used according to the supported label directions. Therefore, foods containing residues resulting from this use are safe to eat, and MRLs are being proposed as a result of this assessment.

Dietary health assessment

In assessing the risk of a pesticide, Health Canada combines information on pesticide toxicity with information on the degree and duration of dietary exposure to the pesticide residue from food. The risk assessment process involves four distinct steps:

- 1) Identifying the toxicology hazards posed by the pesticide;
- 2) Determining the “acceptable dietary level” for Canadians (including all vulnerable populations), which is protective of adverse health effects;
- 3) Estimating human dietary exposure to the pesticide from all applicable sources (domestic and imported commodities); and
- 4) Characterizing health risk by comparing the estimated human dietary exposure to the acceptable dietary level.

Before registering a pesticide for food use in Canada, Health Canada must determine the quantity of residues that could 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 (step 3 and step 4). If estimated human exposure is less than or equal to the acceptable level (developed in step 2), Health Canada concludes that consuming residues resulting from use according to approved label directions is not a health concern. The proposed MRL is then subject to consultation to legally specify it as an MRL. An MRL applies to the identified raw agricultural food commodity, as well

¹ A maximum residue limit (MRL) is the maximum amount of residue that may remain in or on food when a pesticide is used according to label directions.

as to any processed food product that contains it, except for certain instances where different MRLs are specified for the raw agricultural commodity and its processed product(s).

Consultation on the proposed MRLs for isocycloseram is being conducted via this document and PRD2026-02. Health Canada invites the public to submit written comments on the proposed MRLs for isocycloseram in accordance with the process outlined in the How to get involved Section of this document, and with the process outlined in PRD2026-02.

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.

Proposed MRLs

The proposed MRLs for isocycloseram are summarized in Table 1.

Table 1 Proposed maximum residue limits for isocycloseram

Common name	Residue definition	MRL (ppm) ¹	Food commodity
Isocycloseram	4-[5-(3,5-dichloro-4-fluorophenyl)-4,5-dihydro-5-(trifluoromethyl)-3-isoxazolyl]-N-(2-ethyl-3-oxo-4-isoxazolidinyl)-2-methylbenzamide	10	Leafy vegetables (crop group 4-13), except head lettuce
		4.0	<i>Brassica</i> head and stem vegetable group (crop group 5-13)
		2.0	Dried tomatoes
		1.5	Dried prune plums
		1.0	Stone fruits (crop group 12-09)
		0.6	Fruiting vegetables (crop group 8-09)
		0.5	Almond oil
		0.4	Pome fruits (crop group 11-09)
		0.2	Tree nuts (crop group 14-11)
		0.15	Cucurbit vegetables (crop group 9); dry soybeans
0.01	Tuberous and corn vegetables (crop subgroup 1C); dry lentils, head lettuce, peanuts		

¹ ppm = parts per million

The commodities included in the listed crop groups/subgroups can be found on the Residue Chemistry Crop Groups webpage in the Pesticides and pest management section of Canada.ca.

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum residue limits, human health, and food safety 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

The MRLs proposed for isocycloseram in Canada are the same as corresponding tolerances in the U.S., except for head lettuce and certain tree nuts, in accordance with Table 2.

The U.S tolerances for isocycloseram 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 proposed Canadian MRLs, U.S. tolerances and Codex MRLs

Commodity	Proposed Canadian MRLs (ppm)	Established U.S. tolerances (ppm)	Established Codex MRLs (ppm)
Leafy vegetables (crop group 4-13), except head lettuce	10	10	Not established
<i>Brassica</i> head and stem vegetable group (crop group 5-13)	4.0	4	0.7 (broccoli) 2 (Brussels sprouts) 4 (cabbages, head) 0.5 (cauliflower)
Dried tomatoes	2.0	2	2
Dried prune plums	1.5	1.5	1.5
Stone fruits (crop group 12-09)	1.0	1	1 (cherries subgroup) 0.3 (peaches (including apricots and nectarine) subgroup) 0.4 (plums (including fresh prunes) subgroup)
Fruiting vegetables (crop group 8-09)	0.6	0.6	0.3 (eggplant) 0.6 (peppers chili) 4.2 (peppers chili, dried) 0.3 (peppers, sweet (including pimento or pimienta)) 0.5 (tomato)
Almond oil	0.5	Not established	Not established

Commodity	Proposed Canadian MRLs (ppm)	Established U.S. tolerances (ppm)	Established Codex MRLs (ppm)
Pome fruits (crop group 11-09)	0.4	0.4	0.4
Tree nuts (crop group 14-11)	0.2	<p>0.2 (almond; almond, tropical; beechnut; bunya; candlenut; chestnut; chinquapin; gingko; nut, monkey puzzle; nut, okari; nut, peach palm; nut, pili; nut, pine; pequi; pine, Brazilian; pistachio; yellowhorn)</p> <p>0.01 (African nut-tree; bur oak; butternut; cashew; chestnut, Guiana; coconut; hazelnut; heartnut; horse-chestnut, Japanese; monkey-pot; nut, Brazil; nut, cajou; nut, coquito; nut, dika; nut, hickory; nut, macadamia; nut, mongongo; nut, pachira; nut, sapucaia; pecan; walnut, black; walnut, English)</p>	Not established

Commodity	Proposed Canadian MRLs (ppm)	Established U.S. tolerances (ppm)	Established Codex MRLs (ppm)
Cucurbit vegetables (crop group 9)	0.15	0.15	0.1 (cucumber) 0.15 (melons (except watermelon)) 0.09 (summer squash)
Dry soybeans	0.15	0.15	0.15
Tuberous and corm vegetables (crop subgroup 1C)	0.01	0.01	0.01 (potato)
Dry lentils	0.01	0.01 (Vegetable, legume, pulse, bean, dried shelled, except soybean (crop subgroup 6-22E); Vegetable, legume, pulse, pea, dried shelled (crop subgroup 6-22F))	Not established
Peanuts	0.01	0.01	Not established
Head lettuce	0.01	10 (Vegetable, leafy (crop group 4-16))	Not established

How to get involved

Health Canada invites the public to submit written comments on the proposed MRLs for isocycloseram up to 75 days from the date of publication of this document (by 14 April 2026). Please forward your comments to the Pest Management Regulatory Agency Publications Section. Health Canada will consider all comments received and a science-based approach will be applied in making a final decision on the proposed MRLs. Comments received will be addressed in a response to comments document found in Pesticides and pest management consultations. The established MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.