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Proposed Maximum Residue Limit

PMRL2019-08

Ferbam, Thiram and Ziram

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Publications
Pest Management Regulatory Agency
Health Canada
2720 Riverside Drive
A.L. 6607 D
Ottawa, Ontario K1A 0K9

Internet: canada.ca/pesticides
hc.pmra.publications-arla.sc@canada.ca
Facsimile: 613-736-3758
Information Service:
1-800-267-6315 or 613-736-3799
hc.pmra.info-arla.sc@canada.ca

Canada 

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Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) recommended cancellation of all food uses of ferbam and ziram in Canada; and granted continued registration of products containing thiram for sale and use in Canada. The only food uses supported for thiram are the seed treatment uses.

Before registering a pesticide for food use in Canada or allowing continued registration, 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 specified 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.

Ferbam

The dietary assessment for ferbam was published in the PRVD2016-05. Based on the comments received through the consultation process, the dietary risk assessment was revised. In the final re-evaluation decision for ferbam (RVD2018-37), human health risks were identified for all uses. Therefore, all established MRLs for ferbam are proposed for revocation.

Ziram

The dietary assessment for ziram was published in the PRVD2016-06. Based on the comments received through the consultation process, the dietary risk assessment was revised. In the final re-evaluation decision for ziram (RVD2018-39), human health risks were identified for all food uses. Therefore, all established MRLs for ziram are proposed for revocation.

Thiram

The dietary assessment for thiram was published in the PRVD2016-07. Based on the comments received through the consultation process, the dietary risk assessment was revised. In the final re-evaluation decision for thiram (RVD2018-38), no human health risks were identified for the seed treatment uses on barley, bean, beet, broccoli, Brussels sprout, cabbage, canola, cantaloupe, carrot, cauliflower, celery, corn, cucumber, eggplant, flax, lentil, lettuce, mustard, oat, onion, pea, pepper, pumpkin, radish, rapeseed, rye, safflower, soybean, spinach, squash, sugar beet, tomato, triticale, turnip, watermelon, and wheat. Potential residues from these seed treatment uses will continue to be regulated under subsection B.15.002(1) of the Food and Drug Regulations, which requires that residues not exceed 0.1 ppm. For all other food uses, human health risks of concern were identified. Therefore, all established MRLs for thiram are proposed for revocation.

Following the revocation of ferbam, ziram and thiram MRLs, all crops will be regulated under subsection B.15.002(1) of the Food and Drug Regulations, which requires that residues not exceed 0.1 ppm. Consultation on the revocation of these MRLs is being conducted via this document.

To comply with Canada's international trade obligations, consultation on the revocation of MRLs is also being conducted internationally by notifying the World Trade Organization, as coordinated by Canada's Notification Authority and Enquiry Point.

International Situation and Trade Implications

To mitigate human health risks associated with all food uses, except the thiram seed treatment uses, all ferbam, ziram and thiram MRLs are proposed for revocation. Table 1, Table 2 and Table 3 compare the MRLs to be revoked in Canada, for ferbam, ziram and thiram uses respectively, with corresponding American tolerances and Codex MRLs.

American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide, and a listing of established Codex MRLs is available on the Codex Alimentarius Pesticide Index webpage, by pesticide or commodity.

Table 1 Comparison of Canadian MRLs, American Tolerances and Codex MRLs (where different) - for Ferbam

Food Commodity	Canadian MRL	American Tolerance (ppm)	Codex MRL (ppm)
Apples	Revoked 7 ppm MRL ¹	4.0	5 (Pome fruits)
Apricots	Revoked 7 ppm MRL ¹	Not established	7 (Stone fruits)
Asparagus	Revoked 7 ppm MRL ¹	Not established	0.1
Bulb onions	Revoked 7 ppm MRL ¹	Not established	0.5
Cabbages	Revoked 7 ppm MRL ¹	None (revoked 10/27/07)	5
Carrot roots	Revoked 7 ppm MRL ¹	Not established	1
Cherries	Revoked 7 ppm MRL ¹	4.0	0.2
Collards	Revoked 7 ppm MRL ¹	Not established	15
Cranberries	Revoked 7 ppm MRL ¹	4.0	5
Cucumbers	Revoked 7 ppm MRL ¹	Not established	2
Currants	Revoked 7 ppm MRL ¹	Not established	10
Grapes	Revoked 7 ppm MRL ¹	4.0	5

Food Commodity	Canadian MRL	American Tolerance (ppm)	Codex MRL (ppm)
Kales	Revoked 7 ppm MRL ¹	Not established	15
Lettuce	Revoked 7 ppm MRL ¹	None (revoked 10/27/07)	0.5 (Head lettuce) 10 (Cos lettuce)
Mangoes	Revoked 7 ppm MRL ¹	4.0	2
Melons	Revoked 7 ppm MRL ¹	Not established	0.5 (Melons, except watermelon) 1 (Watermelon)
Nectarines	Revoked 7 ppm MRL ¹	4.0	7 (Stone fruits)
Papayas	Revoked 7 ppm MRL ¹	Not established	5
Peaches	Revoked 7 ppm MRL ¹	4.0	7 (Stone fruits)
Peanuts	Revoked 7 ppm MRL ¹	Not established	0.1
Pears	Revoked 7 ppm MRL ¹	4.0	5 (Pome fruits)
Peppers	Revoked 7 ppm MRL ¹	Not established	1 (Sweet peppers)
Plums	Revoked 7 ppm MRL ¹	Not established	7 (Stone fruits)
Pumpkins	Revoked 7 ppm MRL ¹	Not established	0.2
Quinces	Revoked 7 ppm MRL ¹	Not established	5 (Pome fruits)
Squash	Revoked 7 ppm MRL ¹	Not established	1 (Summer squash) 0.1 (Winter squash)
Strawberries	Revoked 7 ppm MRL ¹	Not established	5
Sweet corn	Revoked 7 ppm MRL ¹	Not established	0.1
Tomatoes	Revoked 7 ppm MRL ¹	Not established	2

¹ Following the revocation of the MRLs, all crops will be regulated under subsection B.15.002(1) of the Food and Drug Regulations, which requires that residues not exceed 0.1 ppm.

Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs (where different) - for Ziram

Food Commodity	Canadian MRL	American Tolerance (ppm)	Codex MRL (ppm)
Apples	Revoked 7 ppm MRL ¹	7.0	5 (Pome fruits)
Apricots	Revoked 7 ppm MRL ¹	7.0	7 (Stone fruits)
Blueberries	Revoked 7 ppm MRL ¹	7.0	Not established
Bulb onions	Revoked 7 ppm MRL ¹	Not established	0.5
Cabbages	Revoked 7 ppm MRL ¹	Not established	5
Carrot roots	Revoked 7 ppm MRL ¹	Not established	1
Cherries	Revoked 7 ppm MRL ¹	7.0	0.2
Collards	Revoked 7 ppm MRL ¹	Not established	15
Cranberries	Revoked 7 ppm MRL ¹	Not established	5
Cucumbers	Revoked 7 ppm MRL ¹	Not established	2
Grapes	Revoked 7 ppm MRL ¹	7.0	5
Huckleberries	Revoked 7 ppm MRL ¹	7.0	Not established
Kales	Revoked 7 ppm MRL ¹	Not established	15
Lettuce	Revoked 7 ppm MRL ¹	Not established	0.5 (Head lettuce) 10 (Cos lettuce)
Melons	Revoked 7 ppm MRL ¹	Not established	0.5 (Melons, except watermelon) 1 (Watermelon)
Nectarines	Revoked 7 ppm MRL ¹	7.0	7 (Stone fruits)
Peaches	Revoked 7 ppm MRL ¹	7.0	7 (Stone fruits)
Peanuts	Revoked 7 ppm MRL ¹	Not established	0.1
Pears	Revoked 7 ppm MRL ¹	7.0	5 (Pome fruits)

Food Commodity	Canadian MRL	American Tolerance (ppm)	Codex MRL (ppm)
Peppers	Revoked 7 ppm MRL ¹	Not established	1 (Sweet peppers)
Pumpkins	Revoked 7 ppm MRL ¹	Not established	0.2
Quinces	Revoked 7 ppm MRL ¹	7.0	5 (Pome fruits)
Squash	Revoked 7 ppm MRL ¹	Not established	1 (Summer squash) 0.1 (Winter squash)
Strawberries	Revoked 7 ppm MRL ¹	7.0	5
Tomatoes	Revoked 7 ppm MRL ¹	7.0	2

¹ Following the revocation of the MRLs, all crops will be regulated under subsection B.15.002(1) of the Food and Drug Regulations, which requires that residues not exceed 0.1 ppm.

Table 3 Comparison of Canadian MRLs, American Tolerances and Codex MRLs (where different) - for Thiram

Food Commodity	Canadian MRL	American Tolerance (ppm)	Codex MRL (ppm)
Apples	Revoked 7 ppm MRL ¹	5.0	5 (Pome fruits)
Bananas	Revoked 1 ppm MRL ¹	2.0	2
Nectarines	Revoked 7 ppm MRL ¹	7.0	7 (Stone fruits)
Peaches	Revoked 7 ppm MRL ¹	7.0	7 (Stone fruits)
Strawberries	Revoked 7 ppm MRL ¹	13	5
Tomatoes	Revoked 7 ppm MRL ¹	Not established	2

¹ Following the revocation of the MRLs, all crops will be regulated under subsection B.15.002(1) of the Food and Drug Regulations, which requires that residues not exceed 0.1 ppm.

Next Steps

The PMRA invites the public to submit written comments on the proposed revocation of MRLs for ferbam, thiram and ziram 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 revocation of MRLs. Comments received will be addressed in a separate document linked to this PMRL.

The revocation of MRLs will be legally in effect as of the date that they are removed from the Maximum Residue Limit Database. The revocation of MRLs will take effect to allow sufficient time for legally treated commodities to clear the channels of trade.