

Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2010-5768
Application: B.5.0 (New MRL for previously assessed TGAI)
Product: Fenamidone Technical Fungicide
Registration Number: 27461
Active ingredients (a.i.): Fenamidone (FED)
PMRA Document Number: 2187656

Purpose of Application

The purpose of this application was to establish maximum residue limits (MRLs) to cover residues of fenamidone in/on imported Crop Subgroup 1B (Root Vegetables, except sugar beet, Subgroup) except radish, Crop Subgroup 1C (Tuberous and Corm Vegetables Subgroup), okra, non-bell pepper, Crop Group 8-09 (Fruiting Vegetable Group) except non-bell pepper, Crop Group 4 (Leafy Vegetables, except Brassica vegetables, Group), cotton, cilantro (coriander), rotational crops (wheat, strawberry, soybean, field and sweet corn), and animal commodities (fat, meat and meat-byproducts of cattle, goat and sheep; milk).

Health Assessments

Residue data for fenamidone on peppers, celery, spinach and cotton, and rotational field accumulation data on strawberries, soybeans, field and sweet corn were submitted to support the establishment of MRLs for fenamidone in/on several imported commodities. Previously submitted residue data for fenamidone on carrots, potatoes, tomatoes, wheat, head and leaf lettuce were also reassessed to support the establishment of MRLs in/on imported commodities. Supporting analytical methodology and freezer storage stability data were also reviewed. In addition, processing data on treated cotton, corn, soybean and wheat were assessed to determine the potential for concentration of residues of fenamidone into processed commodities.

Maximum Residue Limits

Based on residue data from field trials conducted according to label directions or at exaggerated rates, MRLs to cover residues of fenamidone in/on various crops and crop groups will be established as shown in Table 1. Residues of fenamidone in processed commodities not listed in Table 1 are covered under the MRLs for the raw agricultural commodities (RACs).

TABLE 1. Summary of Field Trial and Processing Data Used to Establish Maximum Residue Limits (MRLs) for Fenamidone.

Commodity	Application Method/ Total Application Rate	PHI (days)	Total Fenamidone Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			Min	Max			
Celery	Broadcast foliar/ 1.2 kg a.i./ha	2	2.03	19.83	Not required	None	60 ppm (for Crop Group 4 - Leafy Vegetables, except Brassica vegetables, Subgroup, and for fresh cilantro leaves)
Spinach	Broadcast foliar/ 1.2 kg a.i./ha	2	6.03	32.40	Not required	None	
Head lettuce	Broadcast foliar/ 1.2 kg a.i./ha	2	0.696	11.7	Not required	15 ^a	
Leaf lettuce	Broadcast foliar/ 1.2 kg a.i./ha	2	<0.02	17.5	Not required	20 ^a	
Non-bell peppers	Broadcast foliar/ 1.2 kg a.i./ha	13-14	0.06	1.66	Not required	None	3.5 (for Crop Subgroup 8-09C - Nonbell Pepper/Eggplant Subgroup)
Tomatoes	Broadcast foliar/ 1.2 kg a.i./ha	14	<0.02	0.8	Purée: 1.8x; Paste: 2.7x	1.0 ^b (for tomatoes) 2.2 (for paste) 2.0 (for purée)	1.0 (for Crop Subgroup 8-09A - Tomato Subgroup, except tomatoes, and for bell peppers)
Bell peppers	Broadcast foliar/ 1.2 kg a.i./ha	13-14	0.01	0.20	Not required	None	
Carrot roots	Broadcast foliar/ 1.2 kg a.i./ha	13-16	0.02	0.11	Not required	0.15 ^c	0.15 (for Crop Subgroup 1B - Root Vegetables, except sugar beet, Subgroup excluding radish roots)
Potato tubers	Broadcast foliar/ 1.2 kg a.i./ha	14	<0.02	<0.02	No concentration observed in flakes and chips	0.02 ^d	0.02 (for Crop Subgroup 1C - Tuberos and Corm Vegetables Subgroup, except potatoes)

TABLE 1. Summary of Field Trial and Processing Data Used to Establish Maximum Residue Limits (MRLs) for Fenamidone.

			Total Fenamidone Residues (ppm)				
Cotton seed	At-planting, in furrow application / 0.3 kg a.i./ha	127-190	<0.02	<0.02	No concentration determined	None	0.02

^a The existing MRLs of 20 ppm on leaf lettuce and 15 ppm on head lettuce will be removed as they will be covered under the MRL of 60 ppm proposed for Crop Group 4.

^b Tomatoes are excluded as a 1.0 ppm MRL is already established for the commodity in Canada.

^c The previously proposed MRL of 0.15 ppm for carrots (M2010-5682) will be replaced with the MRL of 0.15 ppm for Crop Subgroup 1B, excluding radish roots.

^d Potatoes are excluded as a 0.02 ppm MRL is already established for the commodity in Canada.

Chemistry, Environmental and Value Assessment

Chemistry, environmental and value assessments were not required for this application.

Conclusion

Following the review of all available data, MRLs are recommended to cover residues of fenamidone in/on cilantro, bell peppers, undelinted cotton seeds, and commodities of Crop Subgroup 1B excluding radish roots, Crop Subgroup 1C, Crop Group 4, Crop Subgroups 8-09A and 8-09C. Residues of fenamidone in these commodities at the established MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

References

PMRA Document Number	Reference
1612325	2004, Reason 500Sc- Magnitude of the residues in/on celery and spinach (Part of the crop group 4)- Leafy vegetables, except Brassicas vegetables), DACO: 7.2.1,7.4,7.4.1
1986249	2001, Fenamidone (RPA 407213): Magnitude of Residues in Processed Wheat Fractions, DACO: 7.4.1,7.4.4,7.4.5
1986262	2004, REASON 500 SC - Magnitude of the Residue in Field Rotational Crops - Strawberries, DACO: 7.2.1,7.4.1,7.4.4
1986266	2004, REASON 500 SC - Magnitude of the Residue in/on Cotton, DACO: 7.2.1,7.4.1
1986268	2005, REASON 500 SC - Magnitude of the Residue in/on Peppers (as Part of Crop Group 8 - Fruiting Vegetables), DACO: 7.2.1,7.4.1
1986275	2007, Storage stability of fenamidone and three metabolites in cotton matrices, DACO: 7.3
1986276	2008, Reason 500 SC - Magnitude of the residue in/on soybean (rotational crop tolerance), DACO: 7.2.1,7.4.1,7.4.4
1986277	2008, Reason 500 SC- Magnitude of the residue in/on sweet corn (rotational crop tolerance), DACO: 7.2.1,7.4.1,7.4.4
1986280	2008, Reason 500 SC- Magnitude of the residue in/on field corn (rotational crop tolerance), DACO: 7.2.1,7.4.1,7.4.4

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2012

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.