

Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2010-4335
Application: New Maximum Residue Limits for a Previously Assessed
Technical Grade Active Ingredient
Product: Propiconazole Technical
Registration Number: 22434
Active ingredients (a.i.): Propiconazole
PMRA Document Number: 2191901

Background

The purpose of this submission was to establish maximum residue limits (MRLs) to cover residues of propiconazole in/on several imported commodities.

Health Assessments

Residue data for propiconazole on garden beets, sugar beets, carrots, dry bulb onions, green onions, celery, almond, pecan, corn, rice, wild rice, sorghum, parsley, bananas, peanut, mint, pineapple and sugarcane were submitted to support the establishment of MRLs for propiconazole in/on several imported commodities. Previously submitted residue data for propiconazole on berries were also reassessed to support the establishment of MRLs in/on imported commodities. In addition, processing data on treated sugar beet roots, field corn, rice, sorghum, parsley, peanut, mint, pineapple and sugarcane were assessed to determine the potential for concentration of residues of propiconazole 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 propiconazole, including all metabolites containing the 2,4-dichlorophenyl-1-methyl substituted moiety, in/on various crops and crop groups will be established as shown in Table 1. Residues of propiconazole 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 Propiconazole (PON).

Commodity	Appl. Method/ Total Appl. Rate (kg a.i./ha)	PHI (days)	Total PON Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			Min	Max			
Garden beet roots	Foliar/ 0.74-0.77	14-16	<0.05	0.27	Not required	None	0.3
Garden beet tops	Foliar/ 0.74-0.77	14-16	0.44	4.3	Not required	None	5.5
Sugar beet roots	Foliar/ 0.36	21-23	<0.05	0.23	Molasses: 7.4x; No concentration observed in refined sugar	None	0.3 (sugar beet roots); 1.5 (molasses)
Carrot roots	Foliar/ 0.49	13-14	<0.05	0.17	Not required	None	0.25
Dry bulb onions	Foliar/ 0.49	14	<0.05	0.18	Not required	None	0.2 (CSG 3-07A)
Green onions	Foliar/ 0.49	0	0.57	7.5	Not required	None	9.0 (CSG 3-07B)
Celery	Foliar/ 0.49-0.62	14	0.05	4.98	Not required	None	5.0 (CSG 4B)
Blueberries	Foliar/ 0.96-1.08	30	0.22	0.66	Not required	0.7 ^a	1.0 (CSG 13-07B)^a
Blackberries	Foliar/ 0.96	30	0.27	0.31	Not required		1.0 (CSG 13-07A)^a
Raspberries	Foliar/ 0.96	30	0.14	0.18	Not required		
Strawberries	Foliar/ 0.5	0-1	0.10	0.91	Not required	1.3 ^b	1.3 (CG 13-07G, except strawberries)^b
Cranberries	0.68	43-44	0.18	0.59	Not required	0.1 (GMRL)	
Almond	0.99-1.02	53-63	<0.05	0.09	Not required	None	0.1 (CG 14)
Pecan	1.1-1.2	7-8 or 14	<0.05	<0.1	Not required	None	0.1 (CG 14)
Corn, field	0.47-0.53	28-35	<0.05	0.15	No concentration observed in meal and oil	0.05 ^c	0.2^c
Corn, pop	0.49	29-30	<0.05	<0.05	Not required	0.05 ^c	
Corn, sweet	0.43-0.49	13-15	<0.05	0.06	Not required	0.05 ^c	
Rice	0.31-0.35	34-49	<0.05	5.24	Bran: 2.3x	0.05 ^d	7.0 (grain)^d; 15.0 (bran)
Wild rice	0.25-0.37	20-58	<0.05	0.40	Not required	0.05 ^e	0.5^e
Sorghum	0.49	18-22	0.52	2.26	No concentration observed in flour	0.05 ^f	3.5^f

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			Min	Max			
Parsley (fresh)	0.48-0.51	13-15	1.2	6.5	Dried leaves: 5.5x	None	13 (fresh parsley leaves & cilantro); 35 (dried parsley leaves)
Bananas	0.9	0	<0.2	<0.2	Not required	None	0.2 (bananas and plantains)
Peanut	0.49	13-14 or 20-21	<0.05	0.10	No concentration observed in oil	None	0.2
Mint	0.38	6-8	0.11	5.45	No concentration observed in oil	None	10
Pineapple	Postharvest dip/ 15.1 g a.i./100L	NA	0.34	4.1	No concentration observed in juice	None	4.5

^a The existing MRL of 0.7 ppm in/on blueberries, currants, elderberries, gooseberries, huckleberries, blackberries, loganberries and raspberries will be removed as they will be covered under the MRL of 1.0 ppm proposed for Crop Subgroups 13-07A and 13-07B.

^b Strawberries are excluded as an MRL of 1.3 ppm is already established for the commodity in Canada.

^c The established MRL of 0.05 ppm for field corn, popcorn and sweet corn will be replaced with the MRL of 0.2 ppm for these commodities.

^d The established MRL of 0.05 ppm for rice will be replaced with an MRL of 7.0 ppm for this commodity.

^e The established MRL of 0.05 ppm for wild rice will be replaced with an MRL of 0.5 ppm for this commodity.

^f The established MRL of 0.05 ppm for sorghum will be replaced with an MRL of 3.5 ppm for this commodity.

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 propiconazole, including all metabolites containing the 2,4-dichlorophenyl-1-methyl substituted moiety, in/on garden beet roots and tops, sugar beet roots and molasses, carrot roots, field corn grain, popcorn grain, sweet corn K+CWHR, rice grain and bran, wild rice, sorghum, fresh parsley leaves and cilantro, dried parsley leaves, bananas and plantains, peanuts, mint, pineapple, and commodities of Crop Group 14, and of Crop Subgroups 3-07A, 3-07B, 4B, 13-07A, 13-07B and 13-07G. Residues 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.

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