

Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2019-6620
Application: New Maximum Residue Limits (MRLs) for previously assessed Technical Grade Active Ingredient (TGAI)
Product: Propiconazole Technical
Registration Number: 22434
Active ingredient (a.i.): Propiconazole
PMRA Document Number: 3184706

Purpose of Application

The purpose of this application was to establish maximum residue limits (MRLs) for residues of propiconazole in/on various imported commodities, including dill, watercress, radish, avocado, ti palm, quinoa and commodities in Crop Subgroup 4-13B (Brassica leafy greens, except watercress), Crop Subgroup 1B (Root vegetables except sugar beet) and Crop Group 12-09 (Stone fruits, revised).

Health Assessments

Residue data for propiconazole in avocado, dill, mustard greens, radish and watercress were submitted to support the maximum residue limits on various imported commodities. Previously reviewed residue data from field trials conducted in/on barley, carrot, garden beet, stone fruits and sugar beet were also reassessed in the framework of this petition. In addition, a processing study in treated wheat was reassessed to determine the potential for concentration of residues of propiconazole into processed commodities.

Maximum Residue Limits

The recommendation for MRLs for propiconazole was based upon the submitted field trial data and the guidance provided in the [OECD MRL Calculator](#). MRLs to cover residues of propiconazole in/on crops and processed commodities are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs). Table 2 summarizes the residue data used to calculate the proposed MRLs.

Table 1 Proposed Maximum Residue Limits for Propiconazole

MRL (ppm) ¹	Food Commodity
80	Dried dillweed leaves
30	Fresh dillweed leaves
20	Brassica leafy greens (crop subgroup 4-13B), except watercress
15	Dill seeds
10	Ti palm leaves
6.0	Watercress
4.0	Stone fruits (crop group 12-09, except plums) ²
3.0	Quinoa
0.3	Root vegetables, except sugar beet (crop subgroup 1B, except garden beet roots) ³ , ti palm roots
0.2	Avocados, radish tops

¹ ppm = parts per million

² The MRL is proposed to extend the currently established 4.0 ppm for crop group 12 to the remaining commodities in the revised crop group 12-09. Plums are excluded from this MRL action as a 1.0 ppm MRL is established for the commodity.

³ The MRL is proposed to replace the currently established MRL of 0.25 ppm for carrot roots. Garden beet roots are excluded from this MRL action as a 3.0 ppm MRL is already established for the commodity.

Table 2 Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits

Commodity	Application Method/ Total Application Rate (g a.i./ha) ¹	Preharvest Interval (days)	Lowest Average Field Trial Residues (ppm)	Highest Average Field Trial Residues (ppm)	Experimental Processing Factor
Radish roots	Foliar Broadcast/ 503-513	12-14	<0.01	0.0219	Not required
Radish tops			<0.01	0.108	Not required
Carrot roots	Foliar/ 494	13-14	<0.05	0.155	Not required
Garden beet roots	Foliar/ 744-769	14-16	<0.05	0.19	Not required
Garden beet tops			0.45	4.3	Not required
Sugar beet roots	Foliar/ 369	21-23	<0.05	0.07	Not required
Mustard greens	Foliar broadcast or foliar directed/ 375-395	6-8	<0.096	10.78	Not required
Watercress	Foliar broadcast/ 268-401	3	1.08	3.38	Not required
	Foliar broadcast/ 536-675		1.30	2.88	
	Chemigation/ 269		0.817	0.817	
	Chemigation/ 538		0.520	0.520	

Commodity	Application Method/ Total Application Rate (g a.i./ha) ¹	Preharvest Interval (days)	Lowest Average Field Trial Residues (ppm)	Highest Average Field Trial Residues (ppm)	Experimental Processing Factor
Fresh dillweed	Foliar broadcast/ 364-378	7	1.61	11.1	Not required
Dried dillweed		7	5.57	38.5	Not required
Dill seed		36-51	0.074	6.63	Not required
Avocado	Infusion 2.43-3.46 g a.i./cm tree diameter	6-8	<0.01	<0.011	Not required
	Injection 2.35 - 2.54 g a.i./cm tree diameter	6-8	<0.01	<0.01	
Cherry	Post-Harvest Dip/ 0.11244-0.11265 lb a.i./100 gallons	0	0.65	2.23	Not required
	Post-Harvest Spray/ 0.11208 lb a.i./25,000 pound fruit	0	0.16	0.24	
Peach	Post-Harvest Dip/ 0.11252-0.11285 lb a.i./100 gallons	0	0.73	2.52	Not required
	Post-Harvest Spray/ 0.11365-0.11861 lb a.i./200,000 pound fruit	0	0.13	0.56	
Plum	Post-Harvest Dip/ 0.11265 lb a.i./100 gallons	0	0.11	0.22	Not required
	Post-Harvest Spray/ 0.11384-0.11596 lb a.i./200,000 pound fruit	0	0.13	0.40	
Barley grain	Foliar broadcast/ 248-257	16-49	<0.01	1.12	Wheat bran: 1.6x ² Wheat germ: 1.6x ²

LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

¹ g a.i./ha = grams of active ingredient per hectare, unless otherwise noted.

² Processing factor extended from wheat bran/wheat germ.

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of propiconazole. Residues in these crop commodities at the proposed MRLs will

not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Toxicology and occupational exposure assessment were not required for this application.

Chemistry, Value and Environmental Assessments

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

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to establish for residues of propiconazole in/on various imported commodities.

References

PMRA Document Number	Reference
3059542	2019, Available Data to Support Maximum Residue Limits in Imported Crops, DACO: 7.1
3059551	2013, Propiconazole: Magnitude of the Residue on Dill, DACO: 7.4.1
3059552	2013, Propiconazole: Magnitude of the Residue on Mustard Greens, DACO: 7.4.1
3059553	2013, Propiconazole: Magnitude of the Residue on Watercress, DACO: 7.4.1,7.4.2
3059554	2013, Propiconazole: Magnitude of the Residue on Radish, DACO: 7.4.1,7.4.2
3059555	2017, Propiconazole: Magnitude of the Residue on Avocado, DACO: 7.4.1,7.4.2

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