



Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2021-2499
Application: New Maximum Residue Limits (MRLs) for previously assessed Technical Grade Active Ingredient (TGAI)
Product: Revysol Fungicide Technical
Registration Number: 33401
Active ingredient (a.i.): Mefentrifluconazole
PMRA Document Number: 3379440

Purpose of Application

The purpose of this application was to establish maximum residue limits (MRLs) for mefentrifluconazole in/on various imported crops.

Chemistry, Value and Environmental Assessments

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

Health Assessments

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

Residue data for mefentrifluconazole in carrot roots, radish roots, radish tops, turnip tops, bulb onions, green onions, leaf lettuce, spinach, mustard greens, tomatoes, peppers, sunflowers, bananas, coffee, cotton, lentils, and sugarcane were submitted to support the maximum residue limits on imported Crop Subgroup 1B: Root Vegetables (except Sugar Beet), Crop Group 2: Leaves of Root and Tuber Vegetables, Crop Subgroup 3-07A: Bulb Onions, Crop Subgroup 3-07B: Green Onions, Crop Group 4-13: Leafy Vegetables (except head lettuce), Crop Group 8-09: Fruiting Vegetables, Crop Subgroup 20B: Sunflowers, banana, coffee, cotton, lentils, and sugarcane. Previously reviewed residue data on sugar beet roots and tops were reassessed. In addition, processing studies in treated tomato, sugar beet, soybean, cotton, and coffee were reviewed or reassessed to determine the potential for concentration of residues of mefentrifluconazole into processed commodities.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for mefentrifluconazole was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). MRLs to cover residues of mefentrifluconazole 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 1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)							
Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			LAFT	HAF T			
Carrot	450-466	6-7 ⁴	<0.01	0.215	NA	None	Crop Subgroup 1B: Root Vegetables (except Sugar Beet): 0.7
Radish	438-457	7-8	<0.01	0.380	NA		
Radish tops	438-457	7-8	0.37	7.95	NA	None	Crop Group 2: Leaves of Root and tuber Vegetables: 20
Turnip tops	452-457	7	3.15	10.0	NA	None	
Bulb onion	447-465	6-8	<0.01	0.108	NA	None	Crop subgroup 3-07A: Bulb Onions: 0.2
Green onions	448-498	7	0.11	2.05	NA	None	Crop Subgroup 3-07B: Green Onions: 4
Leaf lettuce	447-466	0	2.25	7.20	NA	None	Crop Group 4-13: Leafy Vegetables (except head lettuce): 30
Spinach	449-458	0	3.75	17.00	NA		
Mustard greens	437-455	0	4.10	12.00	NA		
Cherry tomato	372-398	0	0.125	0.405	Dried tomatoes: 9.2x	None	Crop Group 8-09: Fruiting Vegetables: 0.9 Dried tomatoes: 4
Tomato	395-417	0	0.026	0.370	Tomato juice: 0.1x Tomato paste: 0.5x Tomato puree: 0.3x		
Bell pepper	397-405	0	0.044	0.729	NA		
Non-bell pepper	397-398	0 ⁵	0.188	0.602	NA		

TABLE 1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)							
Commodity	Application	PHI	Residues (ppm)		Experimental	Currently	Recommended
Sunflowers	295-308	18-22	<0.01	0.062	Refined oil : <0.83x ¹ <0.02x ²	None	Crop Subgroup 20B: Sunflowers: 0.15
Bananas	700	0 ⁶	0.026	0.605	NA	None	1.5
Coffee	407-520	9-15 ⁷	<0.01	0.435	Concentrated liquor: 0.07x Instant: 0.2x Roasted and grounded: 0.6x	None	0.5
Cotton	438-458	28-33	0.01	0.118	Refined oil : <0.02x	None	0.2
Lentils	447-454	20-22	0.04	0.68	NA	2	None
Sugarcane	298-324	13-14	0.097	0.97	Refined sugar: <0.06x ³	None	1.5

LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial; NA=Not Applicable

¹Processing factor taken from processing data for soybean.

²Processing factor taken from processing data for cotton.

³Processing factor taken from processing data for sugar beet.

⁴Residues from a 14-day decline trial sample was used in the OECD MRL calculator for carrot root.

⁵Residues from a 3-day decline trial sample was used in the OECD MRL calculator for non-bell pepper.

⁶Residues from 1, 3, and 7-day decline trial samples were used in the OECD MRL calculator for banana.

⁷Residues from 30, 45, and 60-day decline trial samples were used in the OECD MRL calculator for coffee.

Following the review of all available data, the MRLs proposed in Table 1 are recommended to cover residues of mefentrifluconazole. Dietary risks from exposure to residues of mefentrifluconazole in these crop commodities at the proposed MRLs were shown to be acceptable for the general population and all subpopulations, including infants, children, adults and seniors. Thus the foods that contain residues as listed in Table 1 are considered safe to eat.

Conclusion

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

References

PMRA Document Number	Reference
3226181	2015, Validation of BASF Method Number L0076/09 for the determination of BAS 750 F in citrus (whole fruit), coffee (grain), dry beans (seed), soybeans (grain), tomato (whole fruit), wheat (grain) and wheat (straw) using LC-MS/MS, DACO: 7.2.1,7.2.2
3226183	2018, Magnitude of the Residue of BAS 750 F in Carrot and Radish Following Applications of BAS 750 03 F, DACO: 7.4.1,7.4.2
3226185	2018, Magnitude of the Residue of BAS 750 F in/on Turnip Tops Following Applications of BAS 750 03 F, DACO: 7.4.1,7.4.2
3226187	2019, Magnitude of the Residue of BAS 750 F in Sunflower Seeds Following Applications of BAS 750 03 F, DACO: 7.4.1,7.4.2
3226191	2018, Magnitude and Decline of BAS 750 F Residues Following Applications of BAS 750 03 F to Fruiting Vegetables (Crop Group 8), DACO: 7.4.1,7.4.2
3226193	2018, Magnitude of the Residue of BAS 750 F in/on Bulb Vegetables Following Applications of BAS 750 02 F, DACO: 7.4.1,7.4.2
3226197	2019, Magnitude and decline of the residues of BAS 750 F and metabolites in sugarcane following treatment with BAS 750 03 F., DACO: 7.4.1,7.4.2
3226199	2019, Magnitude of BAS 750 F residues following applications of BAS 750 03 F to cotton., DACO: 7.4.1,7.4.2
3226204	2019, Magnitude of the Residues of BAS 750 F in Leafy Vegetables Raw Agricultural Commodities Following Applications of BAS 750 02 F, DACO: 7.4.1,7.4.2
3226206	2020, Magnitude of the Residues of Mefentrifluconazole (BAS 750 F) and Metabolites in Lentils Following Treatment with BAS 750 01 F, DACO: 7.4.1,7.4.2
3226207	2019, Residue study of mefentrifluconazole in citrus, after treatment with BAS 750 02 F under field conditions in Mexico, DACO: 7.4.1,7.4.2
3226209	2019, Residue Study of mefentrifluconazole in banana bagged and unbagged (whole fruit, pulp and peel) after treatment with BAS 750 02 F under field conditions in Brazil, Columbia and Ecuador, DACO: 7.4.1,7.4.2
3226212	2017, Residue study of BAS 750 F and Pyraclostrobin in coffee (beans) after treatment with BAS 750 01 F, under field conditions in Brazil, DACO: 7.4.1,7.4.2
3226214	2018, Residue study of mefentrifluconazole and fluxapyroxad in coffee (beans), after treatment with BAS 752 01 F, under field conditions in Brazil, DACO: 7.4.1,7.4.2
3226217	2016, Residue study of BAS 750 F, fluxapyroxad and pyraclostrobin in coffee (beans), after treatment with BAS 753 03 F, under field conditions in Brazil, DACO: 7.4.1,7.4.2

PMRA Document Number	Reference
3226219	2019, Residue study of mefentrifluconazole in coffee (beans), after treatment with BAS 751 01 F under field conditions in Ecuador and Columbia, DACO: 7.4.1,7.4.2
3226220	2018, Magnitude of BAS 750 F Residues in Tomato Processed Fractions, DACO: 7.4.5
3226222	2019, Magnitude of BAS 750 F residues in cotton processed fractions following applications of BAS 750 03 F to cotton., DACO: 7.4.5
3325158	2019, Residue Study of mefentrifluconazole in coffee (dried coffee cherry, beans and processed fractions) after treatment with BAS 751 01 F under field conditions in Brazil, DACO: 7.4.5

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