

Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2023-2068
Application: New Maximum Residue Limit (MRL) for previously assessed Technical Grade Active Ingredient (TGAI)
Applicant: Gowan Company, L.L.C.
Product: Fenazaquin Technical Miticide/Fungicide
Registration Number: 34543
Active ingredient (a.i.): Fenazaquin
PMRA Document Number : 3610915

Purpose of Application

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

Health Assessments

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

A metabolism study in lettuce, representing the leafy vegetable crop category, was submitted in support of the current application and was found to be scientifically acceptable. Metabolism studies in the crop categories of fruit (apple, grape, orange) and cereal/grass crops (field corn) have been previously reviewed (PRD2022-11, *Proposed Registration Decision, Fenazaquin, Magister SC Miticide/Fungicide, and Magus SC Miticide*). As similar metabolism (similar metabolic pathways and resulting metabolites) has been demonstrated in three dissimilar crop categories, the metabolism data can be extended to all plant commodities.

Residue data from field trials conducted in the United States and India (tea only) were reviewed to support the importation of treated avocados, hops (dried cones), dried shelled peas and beans (except soybeans), edible-podded bean and pea legume vegetables, mint tops, succulent shelled peas and beans, and tree nuts from the U.S., as well as treated tea (dried leaves) from India. Fenazaquin was applied to almonds, avocados, dry beans (pinto), dry peas, garden peas, hops, lima beans, mint, pecans, snap beans, snap peas, snow peas and tea at label rates, and harvested according to label directions. In addition, a processing study in treated mint was reviewed to determine the potential for concentration of residues of fenazaquin into oil.

The storage stability data (on almond nutmeat, a high oil content and high protein content commodity, and on hops dried cones, a high oil content commodity) submitted to complete the data on file for fenazaquin were deemed to be scientifically acceptable.

Maximum Residue Limits

The recommendation for proposed MRLs for fenazaquin was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). MRLs to cover residues of

fenazaquin 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)	Proposed MRL (ppm)
			LAFT	HAF T			
Snow and snap peas	Foliar/481.6-529.8	7	0.041	0.134	Not required	None	0.4 Edible-podded bean and pea legume vegetables (crop subgroups 6-21A and 6-21B)
Snap bean	Foliar/501.8-525.3	7	0.091	0.180	Not required	None	
Garden pea	Foliar/499.5-504.0	7	<0.01	<0.01	Not required	None	0.03 Succulent shelled beans and peas (crop subgroups 6-21C and 6-21D)
Lima bean	Foliar/492.8-510.7	7	<0.01	0.017	Not required	None	
Dry pea	Foliar/492.8-508.5	7	0.01	0.052	Not required	None	0.3 Pulses dried shelled beans (except soybeans) and peas (crop subgroups 6-21E and 6-21F)
Dry bean (pinto)	Foliar/500.6-521.9	7	<0.01	0.168	Not required	None	
Almond nutmeat	Foliar/498.2-526.4	7	<0.01	0.011	Not required	None	0.02 Tree nuts (crop group 14-11)
Pecan nutmeat	Foliar/492.8-512.2	6-7	<0.01	0.014	Not required	None	
Avocado (whole)	Foliar/469.3-511.8	7	0.028	0.082	Not required	None	0.15 Avocados

TABLE 1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)							
Commodity	Application Method/	PHI (days)	Residues (ppm)		Experimental	Currently Establishe	Proposed MRL
Hops dried cones	Foliar/499.5-526.4	7	0.725	11.7	Not required	None	30 Hops (dried cones)
Mint tops	Foliar/492.8-515.2	7	0.571	5.34	No concentration in oil	None	10 Dried peppermint leaves; dried spearmint leaves; fresh peppermint leaves; fresh spearmint leaves
Green tea	Foliar/100	7	0.804	4.97	Not required	None	9 Tea (dried leaves)

ppm = parts per million; LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

Following the review of all available data, the MRLs proposed in Table 1 are recommended to cover residues of fenazaquin. Dietary risks from exposure to residues of fenazaquin 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.

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 acceptable to support establishing MRLs for fenazaquin in/on various imported commodities.

References

PMRA Document Reference Number

2962431 2008, Studies on the Residues of Fenazaquin in Processed Green Tea and Fermented Tea Following the Single Foliar Application of Fenazaquin 10% w/w EC Formulation at the Recommended Dose 1000 ml/ha on Tea Plant in India, DACO: 7.4,7.4.1

PMRA Document Number	Reference
2962432	2012, Studies on the Residues of Fenazaquin in Processed Green Tea and Black Tea (Oxidized) Following the Single Foliar Application of Fenazaquin 10% w/w EC Formulation at the Recommended Dose 1.0 L /ha (100 g a.i./ha) on Tea Plant in India, DACO: 7.4,7.4.1
2962422	2010, Magnitude of the Residue of Fenazaquin and Fenazaquin Dimer on Avocados, DACO: 7.4,7.4.1
2962774	2010, Magnitude of the Residue of GWN-1708 on Dry Beans and Peas, DACO: 7.4,7.4.1
2962775	2010, Magnitude of the Residue of GWN-1708 on Edible-Podded Beans and Peas:, DACO: 7.4,7.4.1
2962778	2010, Magnitude of the Residue of GWN-1708 on Succulent Shelled Beans and Peas, DACO: 7.4,7.4.1
2962780	2010, Magnitude and Decline of the Residue of Fenazaquin and Fenazaquin Dimer in or on Tree Nuts Raw Agricultural Commodities Following One Application of GWN-1708--2008: Final Report., DACO: 7.4,7.4.1
2962781	2010, Magnitude of the Residue of Fenazaquin and Fenazaquin Dimer in or on Hops Raw Agricultural Commodities Following One Application of GWN-1708--2008: Final Report., DACO: 7.4,7.4.1
2962788	2015, Residues of Fenazaquin in or on Hops Following One Application of GWN-1708 (2014): Final Report., DACO: 7.4,7.4.1
2962798	2010, Magnitude and Decline of the Residue of Fenazaquin and Fenazaquin Dimer in or on Mint Raw Agricultural and Processed Commodities Following One Application of GWN-1708--2008: Final Report., DACO: 7.4,7.4.1,7.4.5
3449713	2022, GWN-8033: Metabolism in Lettuce, DACO: 6.3
3510005	2015, Residues of Fenazaquin in or on Almonds Following One Application of GWN-1708 1.67 SC (2012), DACO: 7.3
3510006	2015, Residues of Fenazaquin in or on Hops Following One Application of GWN-1708 (2012), DACO: 7.3

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