

Evaluation Report for Category B Subcategory 5.0 Application

Application Number: 2010-4421
Application: New MRL for previously assessed TGAI
Product: Desmedipham Technical Herbicide
Registration Number: 22315
Active ingredient (a.i.): Desmedipham
PMRA Document Number: 2105465

Purpose of Application

The purpose of this application was to establish maximum residue limits (MRLs) for desmedipham in/on imported spinach and sugar beet roots.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessment

Residue data for desmedipham in sugar beets and spinach from trials conducted in North American representative regions were submitted to support the establishment of MRLs on imported sugar beets and spinach. In addition, a processing study in treated sugar beets was assessed to determine the potential for concentration of residues of desmedipham into processed commodities.

Based on the maximum residues observed in crops treated generally according to label directions of the exporting country, MRLs to cover residues of desmedipham in/on crops and processed commodities will be established as shown in Table 1. Residues of desmedipham in processed commodities not listed in Table 1 are covered under established MRLs for the raw agricultural commodities.

Following the review of all available data, MRLs of 0.1 ppm for sugar beet roots and 6.0 ppm for spinach are recommended to cover residues of desmedipham in imported commodities. Residues of desmedipham at the recommended MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental and Value Assessments

Environmental and value assessments were not required for this application.

Conclusions

The PMRA conducted an evaluation of the subject application and recommended MRLs of 0.1 ppm for sugar beet roots and 6.0 ppm for spinach to cover residues of desmedipham in/on imported commodities.

Table 1 Summary of field trial and processing data used to establish maximum residue limits (MRLs)

Commodity	Application method/ Total rate (g a.e./ha)	PHI* (days)	Residues (ppm)		Mean experiment processing factor	Currently established MRL (ppm)	Recommended MRL(ppm)
			Min	Max			
Sugar beet roots	Post-emergent/ 1.32-1.38	75-76	<0.05	<0.05	Residues of desmedipham were <0.05 ppm in sugar beet roots, and in the processed commodities cosettes, dried pulp, refined sugar and molasses	0.05**	0.1 (sugar beet roots)
Spinach	Post-emergent/ 1.08-1.14	52-71	<0.05	<0.05	Not required	none	6.0 (spinach)

* Pre-harvest interval

** The MRL of 0.05 ppm currently established for sugar beet roots will be proposed for revision to 0.1 ppm to accommodate imported commodities

References

- 1956970 2005, Desmedipham: Magnitude of the residue on spinach, DACO: 7.2.1, 7.3, 7.4.1
- 1956972 2003, Desmedipham: Analytical method for the determination of desmedipham (AE B038107) in sugar beet tops and roots using LC/MS/MS, DACO: 7.2.2, 7.2.5
- 1956973 2007, Desmedipham: Analytical method for the determination of desmedipham (AE B038107) in sugar beet tops and roots using LC/MS/MS, DACO: 7.2.2, 7.2.5
- 1956975 2003, Independent laboratory validation of the residue method for desmedipham (AE B038107) in sugar beet tops using LC/MS/MS, DACO: 7.2.3
- 1956979 2007, Stability of desmedipham and its metabolite EHPC in sugar beet root and leaf during deep freeze storage of 24 months, DACO: 7.3
- 1956984 2002, Desmedipham: Magnitude of residues in sugar beet resulting from foliar applications of Betanex under maximum proposed label specifications, DACO: 7.4.1, 7.4.2, 7.4.6
- 1956988 1991, Residues of desmedipham in sugar beets and processed commodities treated with Betanex in the United States, DACO: 7.4.5, 7.4.6

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services
Canada 2011

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.