

Evaluation Report for Category B, Subcategory 2.1 Application

Application Number:	2022-2091
Application:	New End-use Product- Product Chemistry-Guarantee
Product:	Advantage Glufosinate 280
Registration Number:	34902
Active ingredient (a.i.):	Glufosinate-ammonium
PMRA Document Number	r: 3476667

Purpose of Application

The purpose of this application was to register a new end-use product, Advantage Glufosinate 280, for post-emergent and desiccant application to manage a broad spectrum of weed species in glufosinate-ammonium tolerant canola varieties and hybrids.

Chemistry Assessment

Advantage Glufosinate 280 is formulated as a solution containing glufosinate-ammonium at a concentration of 280 g/L. This end-use product has a density of 1.12 g/mL and pH of 6.5. The required chemistry data for Advantage Glufosinate 280 have been provided, reviewed and found to be acceptable.

Health Assessments

Advantage Glufosinate 280 is of low acute toxicity via the oral, dermal, and inhalation routes of exposure. It is non-irritating to the eyes and to the skin. It is not a skin sensitizer.

The registration of Advantage Glufosinate 280 can be supported from an occupational exposure perspective, as it fits within the registered use pattern of the precedent product. As such, exposure to glufosinate-ammonium is not expected to exceed that of the registered use. No health risks of concern are expected, provided all label use directions, precautions and restrictions are adhered to.

No new residue data for glufosinate-ammonium in canola were submitted or were required to support the registration of Advantage Glufosinate 280. Previously reviewed residue data from field trials conducted in/on canola were reassessed in the framework of this application. In addition, a processing study in treated canola was also reassessed to determine the potential for concentration of residues of glufosinate-ammonium into processed commodities.

The use directions on the Advantage Glufosinate 280 label, including the target crop canola, method (ground and aerial), rates and timing of application, geographic restrictions, preharvest intervals, feeding restrictions, and crop rotation restrictions are comparable to those on the labels of the precedent end-use products.



Based on this assessment, residues are not expected to be greater than those from the currently registered uses and will be covered by the established maximum residue limits (MRLs). Consequently, dietary exposure to residues of glufosinate-ammonium is not expected to increase with the registration of Advantage Glufosinate 280 and will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The uses on the Advantage Glufosinate 280 label are within the currently registered use pattern of glufosinate-ammonium. After a scientific review of the available information, the PMRA has concluded that the environmental risks associated with the use of Advantage Glufosinate 280 are acceptable when used according to label directions.

Value Assessment

Value information was submitted as reports of three field studies in which the performance of Advantage Glufosinate 280 was directly compared to that of a precedent glufosinate-ammonium product registered in the Prairie Provinces and the Peace River region of British Columbia. The data generated in these trials combined with a comparison of product formulations demonstrated that Advantage Glufosinate 280 can be expected to perform similarly to the precedent product when applied at the same rate of active ingredient in terms of both efficacy and crop tolerance. Therefore, the entire use pattern for Advantage Glufosinate 280 was supported by extrapolation from the precedent product.

The availability of Advantage Glufosinate 280 will provide Canadian growers an additional glufosinate-ammonium product for management of weed infestations in glufosinate-ammonium tolerant canola (i.e., varieties and hybrids designated as 'Liberty Link'), in the seed production of hybrid glufosinate-ammonium tolerant canola, and for use as a desiccant on Roundup Ready canola with the podshattering reduction trait.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information acceptable to support the registration of Advantage Glufosinate 280.

References

PMRA	
Document	
Number	Reference
3355871	2022, VALUE ASSESSMENT of Advantage Glufosinate 280, DACO: 10.1
3355875	2021, ACPI GA 280 Efficacy-Tolerance_HA21ZZCJ1_112421, DACO:
	10.2.3.3
3355876	2021, ACPI GA-280PHA, DACO: 10.2.3.3
3355877	2021, HS21ZZCW1_ACPI GA 280_Site Description - Standard Form_Oct-
	29-2021, DACO: 10.2.3.3
3355880	2020, Data for Glufosinate Ammonium 280, DACO:
	3.1.1,3.1.3,3.1.4,3.2.3,3.5.11,3.5.12,3.5.13,3.5.15,3.5.16
3355881	2020, List of Suppliers for Starting Materials, DACO: 3.2.1 CBI
3355882	2020, Manufacturing Process of Glufosinate Ammonium 280G/L SL,
	DACO: 3.2.1,3.2.2 CBI
3355883	2020, Recipe Statement, DACO: 3.2.1,3.2.2 CBI
3355884	2020, Validation of Analytical Methodology for the Assay of Active
	Ingredient in Glufosinate-ammonium 280 g/L SL, DACO: 3.4.1 CBI
3355886	2020, Chemical and Physical Characterization of Glufosinate-ammonium
	280g/L: Color, Physical State, Odor, Density, Corrosion Characteristics to
	Packaging Material and Accelerated Storage Stability, DACO:
	3.5.1,3.5.10,3.5.14,3.5.2,3.5.3,3.5.6 CBI
3355889	2020, Packing information of Glufosinate Ammonium 280g/L SL, DACO:
	3.5.5 CBI
3355892	2021, Chemical and Physical Characterization of Glufosinate-ammonium 280
	g/L SL: pH and viscosity, DACO: 3.5.7,3.5.9
3355893	2020, Chemical and Physical Characterization of Glufosinate-ammonium 280
	g/L SL: Oxidation/reduction, DACO: 3.5.8 CBI
3355898	2015, Reckon 280SL Herbicide (EPA Reg. no. 88685-2) Acute
	Oral Toxicity (UDP) in Rats, DACO: 4.6.1
3355899	2016, Reckon 280SL Herbicide (EPA Reg. no. 88685-2) Acute
	Dermal Toxicity in Rats, DACO: 4.6.2
3355900	2016, Reckon 280SL Herbicide (EPA Reg. no. 88685-2) Acute
	Inhalation Toxicity in Rats, DACO: 4.6.3
3355901	2015, Reckon 280SL Herbicide (EPA Reg. no. 88685-2) Acute
	Eye Irritation in Rabbits, DACO: 4.6.4
3355902	2016, Reckon 280SL Herbicide (EPA Reg. no. 88685-2) Acute
	Dermal Irritation in Rabbits, DACO: 4.6.5
3355903	2022, Toxicology-4.6.6-Skin sensitization-GA 280-March-31-2022, DACO:
	4.6.6 CBI

© His Majesty the King in Right of Canada, as represented by the Minister of Health Canada, 2023

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 Health Canada, Ottawa, Ontario K1A 0K9.