



Australian Government
**Australian Pesticides and
Veterinary Medicines Authority**



Trade Advice Notice

on glufosinate-ammonium in the product Liberty Herbicide for use on canola

APVMA product number 53595

March 2020

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PREFACE

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is an independent statutory authority with responsibility for assessing and approving agricultural and veterinary chemical products prior to their sale and use in Australia.

The APVMA has a policy of encouraging openness and transparency in its activities and of seeking stakeholder involvement in decision making. Part of that process is the publication of Trade Advice Notices for all proposed extensions of use for existing products where there may be trade implications.

The information and technical data required by the APVMA to assess the safety of new chemical products and the methods of assessment must be undertaken according to accepted scientific principles. Details are outlined in regulatory guidance published on the APVMA website.

About this document

This Trade Advice Notice indicates that the Australian Pesticides and Veterinary Medicines Authority (APVMA) is considering an application to vary the use of an existing registered agricultural or veterinary chemical.

It provides a summary of the APVMA's residue and trade assessment.

Comment is sought from industry groups and stakeholders on the information contained within this document.

Making a submission

The APVMA invites any person to submit a relevant written submission as to whether the application to vary the registration of **Liberty Herbicide** should be granted. Submissions should relate only to matters that the APVMA is required by legislation to take into account in deciding whether to grant the application. These grounds relate to the **trade implications** of the extended use of the product. Submissions should state the grounds on which they are based. Comments received outside these grounds cannot be considered by the APVMA.

Submissions must be received by the APVMA by close of business on **31 March 2020** and be directed to the contact listed below. All submissions to the APVMA will be acknowledged in writing via email or by post.

Relevant comments will be taken into account by the APVMA in deciding whether to grant the application and in determining appropriate conditions of registration and product labelling.

When making a submission please include:

- contact name
- company or group name (if relevant)
- postal address

- email address (if available)
- submission date.

All personal and *confidential commercial information (CCI)*¹ material contained in submissions will be treated confidentially.

Written submissions on the APVMA's proposal to grant the application for registration that relate to the **grounds for registration** should be addressed in writing to:

Residues and Trade
Scientific Assessment and Chemical Review
Australian Pesticides and Veterinary Medicines Authority
GPO Box 3262
Sydney NSW 2001

Phone: +61 2 6770 2300

Email: enquiries@apvma.gov.au.

Further information

Further information can be obtained via the contact details provided above.

Further information on public release summaries can be found on the [APVMA website](#).

¹ A full definition of 'confidential commercial information' is contained in the Agvet Code.

1 INTRODUCTION

The APVMA has before it an application from BASF Australia Ltd to vary the use of Liberty Herbicide on canola. The product contains 200 g/L glufosinate-ammonium as its active ingredient.

Liberty Herbicide is currently registered for use in Liberty Link® Hybrid Canola varieties for two applications (seven to 14 days apart) at up to two litres of product/ha (400 g ai/ha) applied from the two leaf stage to early bolting stage for control of a variety of weeds. The current application seeks to increase the maximum application rate to three litres of product/ha (600 g ai/ha) for the control of annual ryegrass and suppression of wild radish at the same application timing as currently approved.

2 TRADE CONSIDERATIONS

2.1 Commodities exported

Canola seed, oil and meal are considered to be major export commodities², as are commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated canola. Residues in these commodities resulting from the use of Liberty Herbicide may have the potential to unduly prejudice trade.

As the mammalian and poultry dietary burden through consumption of canola meal, forage and fodder derived from treated canola should be no greater than previously considered and no changes are required to the established animal commodity MRLs for glufosinate-ammonium. The risk to trade in animal commodities is unchanged and does not require further consideration.

2.2 Destination and value of exports

Australian exports of canola grain, oil and meal totalled 1569 kt, 157 kt and 0 kt respectively in 2018–19, 2336 kt, 159 kt and 0 kt respectively in 2017–18 and 3599 kt and 148 kt and 6.1 kt respectively in 2016–17³. The value of Australian oilseeds, oils and meals totalled \$1b, \$358m and \$12.4m respectively in 2018–19, \$1.6b, \$1.9m and \$8.9m respectively in 2017–18 and \$2.3b, \$4.4m and \$18.1m respectively in 2016–17.

The major export markets for canola grain in 2018–19 included Belgium, Germany, France, Japan and China. Destinations for canola oil included Malaysia, the Republic of Korea, China and New Zealand. The major markets for Canola meal included New Zealand and the Republic of Korea.

² APVMA Regulatory Guidelines, Data Guidelines: Agricultural, Overseas trade (Part 5B)

³ ABARES Agricultural commodities and trade data: agriculture.gov.au/abares/research-topics/agricultural-commodities/agricultural-commodities-trade-data#2019

2.3 Proposed Australian use-pattern

Table 1: Proposed new use pattern

Crop	Weed	Weed stage	Rate	Critical comments
LibertyLink® Canola varieties (with tolerance to Liberty® Herbicide) only. Apply to crop from 2 leaf to early bolting stage.	Annual ryegrass (<i>Lolium rigidum</i>)	2 to 4 leaf/start of tillering (Z12 to Z21)	3 L/ha (600 g ai/ha) followed by 3.0 L/ha (600 g ai/ha)	Apply Liberty® Herbicide to crop from 2 leaf to early bolting stage. IT IS ESSENTIAL TO COMPLETE BOTH APPLICATIONS.
	Suppression only Wild radish (<i>Raphanus raphanistrum</i>)	2 to 4 leaf	7 to 14 days later	The sequential application is designed for a weed control program. Liberty® Herbicide does not provide residual weed control. Apply the second Liberty application 7 to 14 days after the first Liberty application. A shorter interval between applications will result in better weed control. Complete coverage of weeds is essential for good control. Poor coverage may result in re- growth.
				<p><u>Annual ryegrass</u></p> <p>Use the higher rate of Liberty® Herbicide where the weed populations are high or growing conditions are less than ideal.</p> <p>For optimal annual ryegrass control in Liberty Tolerant LibertyLink® Canola varieties only; applications of Liberty® Herbicide should be used in conjunction with pre- and early post- emergence applications of suitable registered herbicides eg pre-emergence applications of metazachlor, propyzamide or trifluralin and post- emergence applications of clethodim on susceptible annual ryegrass.</p> <p>Dual Liberty Tolerant LibertyLink® Triazine Tolerant (LT) Canola varieties</p> <p>For optimal annual ryegrass control in Liberty Tolerant LibertyLink® Triazine Tolerant (LT) Canola varieties only; applications of Liberty® Herbicide should be used in conjunction with pre- and early post-emergence applications of suitable registered herbicides eg pre- emergence applications of atrazine, metazachlor, simazine, propyzamide or trifluralin and post- emergence applications of atrazine or clethodim on susceptible annual ryegrass.</p> <p><u>Wild radish</u></p> <p>Do not apply to dense populations of wild radish (>25 weeds/m²). Use of Liberty® Herbicide in conjunction with a pre-emergence application of atrazine in Liberty Tolerant LibertyLink® Triazine Tolerant (LT) Canola varieties only may result in improved overall suppression.</p>

Restraint:

DO NOT apply after early bolting stage.

DO NOT apply to canola varieties other than LibertyLink® Canola varieties with tolerance to Liberty® Herbicide.

DO NOT apply by aircraft.

DO NOT apply by mister.

Withholding periods:

Harvest: Not required when used as directed.

LIVESTOCK NOT PRODUCING MILK FOR HUMAN CONSUMPTION:

Do not graze or cut for stock food for 10 weeks after application.

LIVESTOCK PRODUCING MILK FOR HUMAN CONSUMPTION:

Do not graze or cut for stock food

Trade Advice

EXPORT OF TREATED PRODUCE

Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with Liberty® Herbicide. If you are growing produce for export, please check with BASF Australia Ltd for the latest information on MRLs and import tolerances BEFORE using Liberty® Herbicide.

2.4 Results from residues trials presented to the APVMA

Seven Australian GLP residue trials conducted in the 2015 and 2016 seasons which involved two applications at 600–814 g ai/ha (1–1.3x the proposed rate) up to early bolting have been considered.

Glufosinate residues in canola grain relevant to the proposed use after treatment are, in rank order: 0.05, 0.08, <0.15 (2), 0.19, 0.23 and 0.31 mg/kg (STMR 0.15 mg/kg).

A glufosinate-ammonium MRL of 0.5 mg/kg for SO 0495 rape seed [canola] is considered to be appropriate for the proposed use in conjunction with a harvest withholding period of 'Not required when used as directed'.

2.5 Codex Alimentarius Commission and overseas MRLs

The Codex Alimentarius Commission (Codex) is responsible for establishing Codex Maximum Residue Limits (CXLs) for pesticides. Codex CXLs are primarily intended to facilitate international trade, and

accommodate differences in Good Agricultural Practice (GAP) employed by various countries. Some countries may accept Codex CXLs when importing foods. Glufosinate-ammonium has been considered by Codex. The following relevant Codex CXLs have been established for glufosinate-ammonium.

Table 2: Overseas MRLs

Commodity	Tolerance for residues arising from the use of glufosinate-ammonium (mg/kg)				
	Australia	EU	Japan	Codex	Korea
Residue definition	Sum of glufosinate-ammonium, N-acetyl glufosinate and 3-[hydroxy(methyl)-phosphinoyl]propionic acid, expressed as glufosinate (free acid).	Sum of glufosinate, its salts, MPP and NAG expressed as glufosinate equivalents.	Sum of glufosinate and 3-methylphosphinico propionic acid, both expressed as glufosinate-ammonium. Glufosinate targeted for standard setting refers to the three compounds: glufosinate, glufosinate-ammonium, and glufosinate-P.	For compliance with MRL and for estimation of dietary intake for animal and plant commodities: Sum of glufosinate, 3-[hydroxy(methyl)phosphinoyl]propionic acid and N-acetyl-glufosinate, calculated as glufosinate (free acid). The residue is not fat soluble.	Sum of glufosinate-ammonium, N-acetyl glufosinate and 3-[hydroxy(methyl)-phosphinoyl]propionic acid, expressed as glufosinate (free acid).
Rape seed (canola)	0.5 (proposed)	1.5	5	1.5	0.3
Oilseeds	*0.1	-	-	-	-
Rape seed oil	-	-	0.05	0.05	-

Note: No residue definition or MRLs exist for China.

Note: a MRL of 5 mg/kg is established for glufosinate-ammonium on rape seed (canola) in the Australian Schedule 20 of the Food Standards Code.

2.6 Current and proposed Australian MRLs for glufosinate-ammonium

Table 3: Current Table 1 MRL Standard

COMPOUND	FOOD	MRL (mg/kg)
GLUFOSINATE AND GLUFOSINATE-AMMONIUM		
MO 0105	Edible offal (mammalian)	5
PE 0112	Eggs	*0.05
MM 0095	Meat (mammalian)	0.1
ML 0106	Milks	*0.05
SO 0088	Oilseed {except cotton seed}	*0.1
PM 0110	Poultry meat	*0.05
PO 0111	Poultry, edible offal of	*0.1

Table 4: Current Table 4 MRL Standard

COMPOUND	FOOD	MRL (mg/kg)
GLUFOSINATE AND GLUFOSINATE-AMMONIUM		
	Rape seed [canola] forage	5
	Rape seed [canola] meal	0.2
	Rape seed [canola] straw and fodder, dry	3

Table 5: Proposed Table 1 MRL Standard

COMPOUND	FOOD	MRL (mg/kg)
GLUFOSINATE AND GLUFOSINATE-AMMONIUM		
DELETE:		
SO 0088	Oilseed {except cotton seed}	*0.1
ADD:		
SO 0088	Oilseeds {except cotton seed; rape seed [canola]}	*0.1
SO 0495	Rape seed [canola]	0.5

Table 6: Proposed Table 4 MRL Standard

COMPOUND	FOOD	MRL (mg/kg)
GLUFOSINATE AND GLUFOSINATE-AMMONIUM		
DELETE:		
	Rape seed [canola] forage	5
	Rape seed [canola] meal	0.2
	Rape seed [canola] straw and fodder, dry	3
ADD:		
AM 0691	Rape seed [canola] forage and fodder	40
	Rape seed [canola] meal	2

2.7 Potential risk to trade

Export of treated produce containing finite (measurable) residues of glufosinate-ammonium may pose a risk to Australian trade in situations where (i) no residue tolerance (import tolerance) is established in the importing country or (ii) where residues in Australian produce are likely to exceed a residue tolerance (import tolerance) established in the importing country.

The proposed Australian MRL of 0.5 mg/kg for glufosinate-ammonium in rape seed [canola], is below MRLs established by the EU (1.5 mg/kg), Japan (5 mg/kg) and Codex (1.5 mg/kg). The proposed Australian MRL is higher than the Korean MRL (0.3 mg/kg) noting the high residue in seven trials was 0.31 mg/kg. There is no MRL for rape seed, oilseeds or rape seed oil for glufosinate-ammonium in China.

It is also noted that a permanent MRL at 5 mg/kg is established for glufosinate-ammonium on rape seed (canola) in Schedule 20 of the Australian Food Standards Code.

The applicant has proposed the following trade advice statement:

EXPORT OF TREATED PRODUCE

Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with Liberty® Herbicide. If you are growing produce for export, please check with BASF Australia Ltd for the latest information on MRLs and import tolerances BEFORE using Liberty® Herbicide.

3 CONCLUSION

BASF Australia Ltd have made an application to vary the use of Liberty Herbicide on canola, requiring the establishment of a permanent MRL at 0.5 mg/kg for rape seed (canola).

Comment is sought on the potential for Liberty Herbicide to prejudice Australian trade when used on canola according to the proposed label directions.