



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



TRADE ADVICE NOTICE

on abamectin in the product Voliam Targo Insecticide for use on grapes

APVMA Product Number 81921

FEBRUARY 2018

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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.

In undertaking this task, the APVMA works in close cooperation with advisory agencies, including the Department of Health and Aging, Department of the Environment and Energy, and State Departments of Primary Industry.

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 is a Trade Advice Notice.

It 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 Voliam Targo Insecticide 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 27 March 2018 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)
- the date you made the submission.

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
PO Box 6182
Symonston ACT 2609

Phone: +61 2 6210 4701

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: www.apvma.gov.au

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

1 INTRODUCTION

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Syngenta Australia Pty Ltd, to vary the registration of Voliam Targo Insecticide, containing abamectin and chlorantraniliprole, to add a use on grapes. No changes are required to current chlorantraniliprole MRLs so only the use of abamectin requires further consideration with respect to Trade.

2 TRADE CONSIDERATIONS

2.1 Commodities exported

Grapes (including dried grapes) and wine 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 grape pomace from treated crops.

2.2 Destination and value of exports

Grapes are a significant export, particularly as wine, although table grapes and dried fruit are also exported. In 2016–17 Australia exported 789 ML of wine worth \$2366 million. Australia exports wine to China, USA, EU, Canada, New Zealand, Hong Kong, Singapore, Malaysia and Japan.³

The smaller volume of table grape exports are predominantly to Asian markets. Dried grapes are exported worldwide. In 2016–17 Australia exported 4.5 kt of dried vine fruit worth \$18.7 million.³

The significant export markets for Australian beef, sheep, pig meat and offals are listed in the APVMA Regulatory Guidelines—Data Guidelines: Agricultural—Overseas trade (Part 5B). However no changes are required to the animal commodity MRLs for abamectin.

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

³ Australian Commodity Statistics 2017

2.3 Proposed Australian use-pattern

Voliam Targo Insecticide (18 g/L Abamectin, 45 g/L Chlorantraniliprole)

CROP	PEST	RATE	CRITICAL COMMENTS
Grapes	Light Brown Apple Moth (<i>Epiphyas postvittana</i>)	55 mL/100 L (0.99 g abamectin / 100 L,	Apply VOLIAM TARGO when action thresholds for the target pests are reached, based on crop monitoring or trap catches. The addition of a non-ionic surfactant such as Agral, may assist control. For best results, application as a dilute spray is recommended. Continue to monitor crops and make subsequent insecticide applications as necessary. Minimum retreatment interval 14 days. DO NOT make more than two applications of VOLIAM TARGO or any other product containing chlorantraniliprole per season. DO NOT apply more than two applications of a Group 28 insecticide per season.
	Grapevine moth (<i>Phalaenoides glycinæ</i>)	2.48 g chlorantraniliprole / 100 L)	
	Two spotted mite (<i>Tetranychus urticae</i>)		
	Grapeleaf rust mite (<i>Epirimerus vitis</i>)		
	Suppression of: Garden weevil (<i>Phlyctinus callosus</i>)		

Restrains:

DO NOT apply by aircraft.

DO NOT apply if rainfall is expected within 2 hours of application.

Withholding periods:

Harvest: Do not harvest for 28 days after application.

Grazing: Do not graze or cut for stock food for 28 days after application.

Trade advice information:

Where this product will be used on produce destined for export markets, seek advice from your industry or Syngenta Australia Pty Ltd representative to ensure product will meet the requirements of the intended importing country.

2.4 Results from residues trials presented to the APVMA

The proposed use of Voliam Targo Insecticide on grapes is for 2 sprays at 55 mL/100 L (0.99 g abamectin/100 L + 2.48 g chlorantraniliprole/100 L) in conjunction with a 28 day harvest withholding period.

Residues of abamectin B1a (the Australian residue definition) in grapes in Australian trials at 27–29 days after the last application at 0.99 g ai/100 L (1× proposed) were <0.003 (4) mg/kg. Residues of abamectin B1a 8,9-Z, abamectin B1b and abamectin B1b 8,9-Z, which are included in some international residue definitions, were also <0.003 (4) mg/kg.

In European trials involving 2 applications of abamectin at 9–13.4 g ai/ha (approximately 1–1.4× proposed for a spray volume of 1000 L/ha), residues of abamectin B1a + 8,9Z-B1a in grapes at 28 days after the last application were <0.002 (6) mg/kg.

In US trials, residues of abamectin B1a + 8,9Z-B1a in grapes at 28 days after the last of 2 applications at approximately 21.0 g ai/ha (2.1× proposed for a spray volume of 1000 L/ha) were <0.001 (6), <0.002 (5), 0.002 (3), 0.003 (3), 0.004 (2), 0.005, 0.007 and 0.01 mg/kg. Scaled for application rate (assuming a spray volume of 1000 L/ha) the HR is 0.005 mg/kg.

An MRL of 0.01 mg/kg for abamectin on FB 0269 Grapes is proposed in conjunction with a 28 day harvest withholding period.

Residues concentrated up to 3.8× in raisins. Based on a scaled HR of 0.005 mg/kg in grapes at 28 days after the last of 2 applications at approximately 21 g ai/ha (2.1× proposed for a spray volume of 1000 L/ha) the highest estimated residue in dried grapes is 0.019 mg/kg. An MRL of 0.03 mg/kg is proposed for abamectin on DF 0269 Dried grapes (= Currants, Raisins and Sultanas).

Residues did not concentrate in juice in 2 out of 3 processing trials. In the 3rd trial residues concentrated 1.6×. Based on a scaled HR of 0.005 mg/kg in grapes at 28 days after the last of 2 applications at approximately 21 g ai/ha (2.1× proposed for a spray volume of 1000 L/ha) the highest estimated residue in juice is 0.008 mg/kg which is within the MRL of 0.01 mg/kg recommended for abamectin on grapes.

In 6 Australian trials residues of abamectin were below the LOD of 0.003 mg/kg in grapes and wine when the last application was made at EL-29.

Grape pomace

Residues concentrated 16.4× on processing to dried pomace. Based on a scaled HR of 0.005 mg/kg in grapes at 28 days after the last of 2 applications at approximately 21 g ai/ha (2.1× proposed for a spray volume of 1000 L/ha) the highest estimated residue in grape pomace, dry is 0.082 mg/kg. An MRL of 0.1 mg/kg is proposed for abamectin on AB 0269 Grape pomace, dry.

Grape pomace can form 20% of the diet for beef and dairy cattle in Australia. An STMR-P of 0.033 mg/kg (0.002 × 16.4) for grape pomace gives an estimated dietary burden of 0.0066 ppm (0.033 × 0.2) due to residues in grape pomace. In a dairy cattle feeding study evaluated by the 1992 JMPR, abamectin residues in milk, liver, muscle, fat and kidney did not exceed 0.004, 0.02, 0.002, 0.014 and 0.005 mg/kg at a feeding level of 0.1 ppm in the diet for 28 days. Consumption of grape pomace containing abamectin residues as a result of the proposed use should not result in residues above current animal commodity MRLs.

2.5 Overseas registration and approved label instructions

The applicant indicated that Voliam Targo is registered for use on grapes in Armenia, Azerbaijan, Brazil, Mexico and Turkey. Products containing abamectin are registered for use on grapes in the USA and a range of countries in Europe.

2.6 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. Abamectin has been considered by Codex. The following relevant Codex CXLs and overseas MRLs have been established for Abamectin.

Table 1: Codex and overseas MRLs for abamectin (mg/kg)

COMMODITY	AUSTRALIA	EU	JAPAN	CODEX	USA
Residue Definition	Avermectin B1a	Sum of avermectin B1a, avermectin B1b and the delta-8,9 isomer of avermectin B1a, expressed as avermectin B1a	Sum of avermectin B1a, avermectin B1b, 8,9-Z-avermectin B1a and 8,9-Z-avermectin B1b	Avermectin B1a	Avermectin B1a and B1b and the delta-8,9-isomers
Grapes	0.01 (proposed)	0.01* (Table and wine grapes)	-	0.01	0.02 (Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F)
Dried grapes	0.03 (proposed)	-	-	0.03	-
Grape juice	-	-	-	0.01	-

2.7 Current and proposed Australian MRLs for Abamectin

Table 2: Current MRL Standard—Table1

COMPOUND	FOOD	MRL (mg/kg)
Abamectin		
MO 0812	Cattle, Edible offal of	0.1
MF 0812	Cattle fat	0.1
MM 0812	Cattle meat	0.005
ML 0812	Cattle milk	0.02
DF 0269	Dried grapes (= Currants, Raisins and Sultanas)	T0.03
MF 0814	Goat fat	0.1
	Goat kidney	0.01
	Goat liver	0.05
	Goat muscle	0.01
ML 0814	Goat milk	0.005
FB 0269	Grapes	T0.01
MO 1284	Pig kidney	0.01
MO 1285	Pig liver	0.02
MM 0818	Pig meat [in the fat]	0.02

COMPOUND	FOOD	MRL (mg/kg)
MO 0822	Sheep, Edible offal of	0.05
MM 0822	Sheep meat [in the fat]	0.05

Table 3: Proposed MRL Standard—Table1

COMPOUND	FOOD	MRL (mg/kg)
Abamectin		
DELETE:		
DF 0269	Dried grapes (= Currants, Raisins and Sultanas)	T0.03
FB 0269	Grapes	T0.01
ADD:		
DF 0269	Dried grapes (= Currants, Raisins and Sultanas)	0.03
FB 0269	Grapes	0.01

2.8 Potential risk to trade

Export of treated produce containing finite (measurable) residues of abamectin 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 grape MRL for abamectin is lower than that established in the USA, and at the same level as established by the EU and Codex.

Australian trials found residues of abamectin B1a, abamectin B1a 8,9-Z, abamectin B1b and abamectin B1b 8,9-Z to be below the LOD of 0.003 mg/kg for each analyte in grapes at the proposed harvest withholding period of 28 days. The highest abamectin B1a + 8,9Z-B1a residue in the relevant international trials when scaled for application rate (assuming a spray volume of 1000 L/ha) was 0.005 mg/kg, which is lower than the Codex and EU MRLs for grapes at 0.01 mg/kg.

Residues of abamectin were below the LOD of 0.003 mg/kg in grapes and wine when the last application was made at EL-29 in 6 Australian trials.

The draft label includes the following trade advice information:

Where this product will be used on produce destined for export markets, seek advice from your industry or Syngenta Australia Pty Ltd representative to ensure product will meet the requirements of the intended importing country.

3 CONCLUSIONS

Syngenta Australia Pty Ltd have made an application to vary the registration of Voliam Targo Insecticide containing abamectin and chlorantraniliprole. Syngenta propose adding a use on grapes which will require the establishment of permanent MRLs for abamectin on grapes and dried grapes.

Comment is sought on the potential for Voliam Targo Insecticide to prejudice Australian trade when used on grapes according to the proposed label directions.