

**Trade Advice Notice**

on

Esfenvalerate

in the product

Sumi-Alpha Flex Insecticide  
[APVMA product number 53047]

Date: 7 December 2009

© Australian Pesticides and Veterinary Medicines Authority [2009]

This work is copyright protected. Apart from any use permitted under the *Copyright Act 1968*, no part may be reproduced without permission from the Australian Pesticides and Veterinary Medicines Authority. Requests and inquiries concerning reproduction and rights can be made **at communications** or addressed to:

The Manager, Public Affairs  
Australian Pesticides and Veterinary Medicines Authority  
PO Box 6182  
Kingston ACT 2604  
Australia

## 1. PREFACE

### 1.1 About this Document

This is a Trade Advice Notice.

It indicates that the Australian Pesticides and Veterinary Medicines Authority (APVMA) is considering an application for registration of an 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 notice.

The APVMA will only consider comment on submissions that relate to the **trade implications** of the extended use of the product. Comments received outside these grounds will not be considered by the APVMA. Comments made on appropriate grounds will be considered with details posted on the APVMA website noting what action has/will be taken in regard to concerns.

Any advice the APVMA receives through this consultation which it relies on to grant this application will be noted in a subsequent Advice Summary.

Advice Summaries can be found at:

<http://www.apvma.gov.au/registration/assessment/advice/index.php>

### 1.2 Prior to Submission

Please note that subject to the *Freedom of Information Act 1982*, the *Privacy Act 1988* and the Agvet Codes all submissions received may be made publicly available. They may be listed or referred to in any papers or reports prepared on this subject matter.

The APVMA reserves the right to reveal the identity of a respondent (you) unless a request for anonymity accompanies your submission. If no request for anonymity is made, you will be taken to have consented to the disclosure of your identity for the purposes of Information Privacy Principle 11 of the *Privacy Act 1988*.

The contents of any submission will not be treated as confidential or confidential commercial information unless they are marked as such and you have provided justification such that the material is capable of being classified as confidential or confidential commercial information in accordance with the *Freedom of Information Act 1982* or the Agvet Codes as the case may be.

### 1.3 About this consultation

The APVMA invites comment on this Trade Advice Notice until 6 January 2009. Submissions should be addressed to:

Dr Jamie Nicholls  
Pesticides Program  
Australian Pesticides and Veterinary Medicines Authority  
PO Box 6182  
KINGSTON ACT 2604

Phone: (02) 6210 4761

Fax: (02) 6210 4776

# CONTENTS

1. PREFACE	
1.1 About this Document	3
1.2 Prior to Submission	3
1.3 About this consultation	3
2. INTRODUCTION	5
3. TRADE CONSIDERATIONS	
3.1 Commodities Exported	6
3.2 Destination and Value of Exports of Grape and Grape Products	6
3.3 Results from residues trials presented to the APVMA	7
3.4 Overseas registration and approved label instructions	7
3.5 Codex Alimentarius commission and overseas MRLs	8
3.6 Current and proposed Australian MRLs	8
3.7 Potential Risk to Trade	9
4. CONCLUSION	9

## 2. INTRODUCTION

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Sumitomo Chemical Australia Pty Ltd to extend the use of Sumi-Alpha Flex Insecticide for control of garden weevil in grapes.

The proposed Australian use pattern for Sumi-Alpha Flex Insecticide in grapes is given below:

### Sumi-Alpha Flex Insecticide (50 g/L esfenvalerate)

CROP	INSECT PEST	STATE	RATE	CRITICAL COMMENTS
Grapevines	Garden weevil ( <i>Phlyctinus callosus</i> )	WA, SA, NSW, Vic and Tas	30 mL/100L (1.5 g ai/100 L)	Do not apply last application later than crop growth stage E-L 31 (berries pea size). Monitor weevil emergence and apply after peak weevil emergence in late spring but before damage. If practical, apply at night when adult weevils are feeding as this will give more effective control. A second application 2 – 4 weeks later may be required. DO NOT apply more than two applications per season. Use of this product may cause outbreak of secondary pests. Dilute Spray in a minimum of 500 L/ha to run-off for thorough coverage. This volume should be increased as vine foliage becomes bigger. Later sprays need thorough wetting for good penetration.

Withholding periods:

Harvest: Grapes: Not required when used as directed.

### 3. TRADE CONSIDERATIONS

#### 3.1 Commodities Exported

Grapes, wine and dried fruit are exported, and are considered major export commodities in Appendix 1 of Part 5B of Ag MoRaG. Mammalian animal commodities derived from stock fed pomace from treated grapes may be exported. No changes are required to existing MRLs for mammalian animal commodities and exports of mammalian meat or dairy products will not be discussed further.

#### 3.2 Destination and Value of Exports of Grapes and Grape Products

The total exports during 2007/08 of Australian table grapes are detailed in the table below (Australian Bureau of Statistics).

##### **Australian Table Grape Exports in 2007/08**

<b>Destination</b>	<b>Value, \$ million</b>
Hong Kong	29.340
Indonesia	16.775
Thailand	12.587
Singapore	7.993
Malaysia	7.208
Vietnam	5.319
New Zealand	4.536
United Arab Emirates	3.667
Taiwan	3.325
Bangladesh	2.036
Sri Lanka	1.379
Other	6.346
<b>TOTAL</b>	<b>100.511</b>

Australian table grapes are generally exported to Asia, with Hong Kong being the most important market in 2007/08.

Australian wine exports were 702.1 megalitres, worth \$2.657 billion, in 2007/08 (Australian Commodities Statistics 2008). Major export destinations for Australian wine are given below in Table 23.

##### **Australian Wine Exports in 2007/08**

<b>Destination</b>	<b>Value, \$ million</b>
Canada	258.9
China	60.5
Germany	49.2
Hong Kong	33.5
Ireland	69.2
Japan	48.0
Netherlands	70.6
New Zealand	83.9
Singapore	45.3
Sweden	40.8
Switzerland	15.4
Thailand	13.2
United Kingdom	876.5

United States	741.0
Other	250.6
TOTAL	2656.8

The most important destination for Australian wine is the UK, where sales were worth \$876.5 million in 2007/08. This was followed by the USA, where sales were worth \$741 million, then Canada at approximately \$250 million. Other European countries, New Zealand, and some countries in Asia are also important markets for Australian wine.

Exports of dried vine fruit from Australia are of minor importance in comparison with wine and table grapes, with exports of 4.9 kilotonnes in 2007/08 being worth \$13 million.

### 3.3 Results from supervised residues trials presented to the APVMA

#### Grapes:

The applicant provided residue studies in four wine grape varieties, over two seasons at nine sites in Tasmania, Western Australia and South Australia. At all sites, at least one plot was treated twice with the final application being at the latest permitted growth stage (E-L 31, BBCH stage 75, or pea sized berries). The label spray concentration (1.5 g ai/100 L) was used, with vines being treated to the point of run-off. Grapes were sampled at harvest, and residues ranged from <0.01 to 0.04 mg/kg.

The trial results detailed above support the increase of the current MRL of \*0.05 mg/kg for fenvalerate in grapes to 0.1 mg/kg.

No grape processing studies were provided. It is not likely that residues of fenvalerate would concentrate in grape products such as wine or juice. Concentration in by-products such as grape pomace, which is used as a stockfeed, and dried grapes is likely given the low water solubility and high fat solubility of fenvalerate. Calculations were undertaken using default processing factors. MRLs of 0.5 mg/kg are proposed for dried grapes and grape pomace, dry. Given that a Maximum Feeding Level (upon which existing animal commodity MRLs are based) of 10 mg/kg for fenvalerate in feed for cattle, sheep and pigs has been determined, replacement of part of the diet of cattle with grape pomace will not risk violation of established MRLs for fenvalerate in milk, eggs, and meat and offal of poultry and mammals.

The proposed use pattern in grapes is supported with minor modifications to the label instructions to include a withholding period statement of 'Not required when used as directed'.

### 3.4 Overseas registration and approved label instructions

The proposed Australian use pattern for fenvalerate in grapes involves up to two applications at a spray concentration of 1.5 g ai/100 L to the point of run-off (at least 500 L/ha), with the final application no later than growth stage E-L 31 (which corresponds to stage 75 on the BBCH scale). The applicant has not indicated whether this or a similar use pattern for fenvalerate is registered overseas for use in grapes.

However, a number of countries have established MRLs for fenvalerate/esfenvalerate in grapes.

### 3.5 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.

Esfenvalerate and fenvalerate have been considered by Codex on a number of occasions, most recently in 2002, although no CXL for grapes has been established.

The following relevant residue tolerances for esfenvalerate/fenvalerate in grapes have been established:

#### Proposed Australian and overseas MRLs/tolerances for esfenvalerate/fenvalerate

Country/status	Commodity	Tolerance, mg/kg	Reference
Korea	Grape	1 (fenvalerate)	MRLs for Pesticides in Foods, Korea Food and Drug Administration
Taiwan	Small berries	1 (fenvalerate, esfenvalerate)	Pesticide Residues Limits in Foods. DOH Food No. 0950401408, amended 15 March 2006
Japan (fenvalerate, current)	Grape	5 (fenvalerate)	MRLs list, Japanese Ministry of Health, Labour and Welfare
Singapore	Berry fruits	1	Sale of Food Act, Food Regulations, Ninth Schedule

#### EU Pesticide MRLs for Fenvalerate/Esfenvalerate

Commodity	MRL (mg/kg)		
	Sum of <i>RR</i> and <i>SS</i> isomers (esfenvalerate and its enantiomer)	Sum of <i>RS</i> and <i>SR</i> isomers	Overall (all four isomers, i.e. fenvalerate)
Table grapes	0.1	0.02	0.12
Wine grapes	0.1	0.02	0.12

### 3.6 Proposed changes to Australian MRLs for esfenvalerate

The Australian residue definition for esfenvalerate and fenvalerate is:  
Fenvalerate, sum of isomers.

Table 1 – Proposed changes for Sumi-Alpha Flex Insecticide

Compound	Food	MRL (mg/kg)
Fenvalerate		
DELETE:	FB 0269 Grapes	*0.05
ADD:		
	DF 0269 Dried grapes	0.5
	FB 0269 Grapes	0.1



Table 4 – Proposed changes for Sumi-Alpha Flex Insecticide

Compound	Animal feed commodity	MRL (mg/kg)
Fenvalerate		
ADD:	AB 0269 Grape pomace, dry	0.5

Note: For full details of Australian esfenvalerate MRLs, please refer to the APVMA website <http://www.apvma.gov.au> and follow the Chemical Residues link.

### 3.7 Potential Risk to Trade

Export of treated produce containing finite (measurable) residues of esfenvalerate 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.

#### *Grapes*

Total table grape exports were worth \$100 million in 2007/08, while dried grape exports were worth \$13 million and wine exports were worth \$2.657 billion.

Exports of wine to EU countries together account for over \$1 billion. Residues of esfenvalerate in grapes or wine are not expected to exceed the MRL of 0.1 mg/kg for esfenvalerate or the limit of 0.12 mg/kg for fenvalerate. Therefore, the risk to Australian exports of wine to the EU is thought to be low.

Some smaller export markets, including Japan and New Zealand either have higher MRLs than Australia or accept Australian MRLs, so there is unlikely to be a risk to exports of wine or grapes to Japan or New Zealand.

MRLs for esfenvalerate in grapes or grape products have not been established in two of the major wine export markets, the USA and Canada (which together account for >\$1 billion of wine exports), along with a number of smaller markets. There is therefore a potential risk to Australian export trade in table grapes and wine to other markets, including the USA, Canada, and China, which have not established MRLs, and some other Asian markets such as Indonesia, Hong Kong, and Thailand which use Codex MRLs (a Codex MRL has not been established for fenvalerate/esfenvalerate in grapes).

Stakeholders are requested to provide comment on the potential risks to trade in grapes and grape products and any possible mitigation measures.

## 4. CONCLUSION

Use of esfenvalerate (as Sumi-Alpha Flex Insecticide) is expected to result in detectable residues in grapes and grape products.

No changes to existing animal commodity MRLs are required as a result of this application.

Comments are sought on the potential for Sumi-Alpha Flex Insecticide to unduly prejudice Australian export trade in grapes, dried fruit and wine when it is used on grapevines to control garden weevil.

A more detailed technical assessment report on the evaluation of the trade implications of this chemical can be obtained by contacting the APVMA on (02) 6210 4748, or alternatively, the reports can be viewed at the APVMA Library which is located at:

18 Wormald Street

Symonston ACT, 2609

Office hours: 9.00 - 5.00 (EST) Monday to Friday