

Trade Advice Note

on

Etoxazole

in the product

**Paramite Selective Miticide
(APVMA Product Number 56791)**

Australian Pesticides and Veterinary Medicines Authority

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Trade Advice Note on the Product

Paramite Selective Miticide

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Sumitomo Chemical Australia Pty Ltd to extend the label of the registered product Paramite Selective Miticide, containing 110 g/L etoxazole. Sumitomo wish to include control of Two-spotted mite and European red mite in pears, stone fruit and table grapes.

Pears

Residue studies on apples and pears were considered in the report for the initial registration of Paramite Selective Miticide. These data were considered sufficient to support a group MRL of 0.2 mg/kg for pome fruit, with a 21 day withholding period. However, due to other issues only the use in apples was supported. It is recommended an MRL of 0.2 mg/kg for pome fruit replace the apple MRL. In the initial report an MRL of 2 mg/kg (dry weight basis) was considered appropriate for apple pomace. Given the similarities between the residues in apples and pears it is appropriate to replace the apple pomace MRL with a group MRL of 2 mg/kg for pome fruit pomace, dry.

Stone fruit

Australian residue data for stone fruit were provided with the application. Residues of etoxazole in peaches and nectarines were <0.01, 0.01, 0.04 and 0.05 mg/kg at 21 days after application at 3.85 – 4 g ai/100 L (1 – 1.04×). The applicant's proposed stone fruit MRL of 0.1 mg/kg is appropriate for peaches and nectarines with a 21 day withholding period. However, to establish a stone fruit group MRL residue data on cherries would also be required. The MRL should therefore be established for stone fruit [except cherries].

Grapes

Australian residue data for table grapes were provided with the application. Residues of etoxazole in grapes were 0.01 (n = 4) and 0.04 mg/kg at 21 days after application at 3.85 – 4 g ai/100 L (1 – 1.04×). An MRL of 0.1 mg/kg for etoxazole on grapes is recommended with a 21 day WHP.

In the 2 processing studies, etoxazole residues of 0.09 and 0.12 mg/kg in grapes corresponded to 0.22 and 0.32 mg/kg in dried fruit, indicating residues concentrate by a factor of 2.4 – 2.7×. Applying this processing factor to the maximum residue in grapes of 0.04 mg/kg at the 21 day WHP would give a maximum residue of 0.11 mg/kg in dried fruit. As this is above the proposed grape MRL, it is appropriate to establish a separate MRL of 0.2 mg/kg for dried grapes.

No separate MRL is required for grape juice as residues of etoxazole were significantly reduced (0.01 mg/kg, n = 2) compared to the raw commodity.

Residues of etoxazole in grape pomace were 0.53 and 0.64 mg/kg, indicating residues concentrate by a factor of 5.3 – 5.9×. Applying this processing factor to the maximum residue in grapes of 0.04 mg/kg at the 21 day WHP would give a maximum residue of 0.24 mg/kg in grape pomace. Assuming a dry matter content of 40% the HR for dry pomace is 0.60 mg/kg. An MRL of 1 mg/kg is recommended for grape pomace, dry.

Animal Commodities

Grape pomace and pome fruit pomace may be fed to livestock. However residues in pome fruit pomace will be the same as previously considered for apple. Where grape pomace is fed to livestock, it was assumed that it would be in place of pome fruit pomace, not in addition to it. As the proposed MRL of 1 mg/kg for grape pomace is less than that for pome fruit pomace this will not result in any change to the current livestock dietary exposure to etoxazole. As such, the current animal commodity MRLs for etoxazole, which are set at the LOQ, remain acceptable for the proposed use on pears, stone fruit and grapes.

1. Commodities exported

Stone fruit, grapes and pears (pome fruit) are considered to be major trade commodities.¹ Animal commodities derived from livestock fed on treated grape and pome fruit pomace are also exported. However, no changes are required to the current animal commodity MRLs set at the LOQ. The risk to trade in animal commodities is therefore considered to be negligible and will not be considered further.

2. Destination and Value of Exports²

Pears

In the 2002/03 season Australia exported 17,652 tonnes of pears valued at \$22.4 million. The major export markets for Australian pears are summarised in table 1.

Table 1: Major export markets for pears in 2002/03.

Importing country	Quantity (tonnes)	Amount (\$'000)
Singapore	4,420	5,723
Malaysia	3,537	4,239
Indonesia	2,843	3,815
Canada	2,099	2,635
New Zealand	1,910	2,143
Hong Kong	670	874
Fiji	225	221
India	225	320
Netherlands	192	181
Switzerland	64	120

Stone fruit

In the 2002/03 season exports of stone fruit included 1,587 tonnes of peaches valued at \$5.5 million and 7,972 tonnes of nectarines valued at \$22.7 million. The major export markets for peaches and nectarines are summarised in tables 2 and 3 respectively.

Table 2: Major export markets for peaches in 2002/03.

¹ Part 5B of the Vet Requirements Series and Ag Requirements Series, Overseas Trade Aspects of Residues in Food Commodities, October 2005.

²The Australian Horticulture Statistics Handbook, 2004.

Importing country	Quantity (tonnes)	Amount (\$'000)
Taiwan	593	2,065
Singapore	262	890
United Arab Emirates	235	771
Hong Kong	122	423
Malaysia	65	219
United Kingdom	55	120
Saudi Arabia	47	200
France	35	222
Bahrain	17	51
Thailand	4	15

Table 3: Major export markets for nectarines in 2002/03.

Importing country	Quantity (tonnes)	Amount (\$'000)
Hong Kong	3,662	8,762
Taiwan	3,518	11,469
Singapore	197	555
Malaysia	151	362
United Arab Emirates	123	378
United Kingdom	78	292
France	28	176
Saudi Arabia	17	74

Grapes

In the 2002/03 season Australia exported 39,752 tonnes of table grapes valued at \$ 95.4 million. The top ten export markets for Australian table grapes in 2002/03 are summarised in table 4.

Table 4: Major export markets for table grapes in 2002/03

Importing country	Quantity (tonnes)	Amount (\$'000)
Hong Kong	15,055	36,426
Malaysia	6,273	14,430
Indonesia	5,842	13,048
Singapore	5,256	12,840
Thailand	2,241	6,213
Vietnam	858	2,254
New Zealand	848	1,969
Bangladesh	822	1,969
Sri Lanka	747	1,379
Other	1,810	4,844

3. Proposed Australian use-pattern

Paramite Selective Miticide (110 g/L etoxazole)

Crop	Pest	Rate	Critical Comments
Pome fruit, Stone fruit (except cherries), Table grapes	Two-spotted mite (<i>Tetranychus urticae</i>), European red mite (<i>Panonychus ulmi</i>)	25 – 35 mL/100 L (2.75 – 3.85 g ai/100 L)	<p>Paramite is a mite growth regulator that causes adults to lay sterile eggs and stops existing eggs and nymphs developing. Control of these stages is generally achieved within 7 days. Paramite also has translaminar and residual activity which means control of the population may last for four to five weeks. It does not control adult mites which normally live for up to two weeks.</p> <p>To give effective long term population control Paramite should therefore be applied at the first signs of mite crawlers. Once large numbers of adults are present it may be necessary to also apply a miticide from a different group to control the adults immediately and reduce potential damage.</p> <p>As a guide, if there are 2 or more adults per leaf, and 15% or more of leaves are infested, a knockdown of adults with a different miticide may be required. This is particularly important in pears where even low mite pressure can cause leaf russetting.</p> <p>Paramite can be applied as dilute or concentrated sprays on apples, stone fruit and table grapes but good coverage is important so the volume should be no less than 750 L/ha.</p> <p>On large pear trees DO NOT use Paramite as a concentrate spray. For dilute sprays on pear trees use a minimum water volume of 2500 L/ha.</p> <p>The lower rate may be used if Integrated Mite management is being used and mite predators are</p>

			present. If re-treatment is required, use an approved miticide from a different chemical group.
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Restrains:

DO NOT apply if rainfall is expected before spray has dried.

DO NOT apply more than one spray per crop season as over-use may lead to development of mite resistance.

DO NOT apply by air.

Withholding periods:

Pome fruit, stone fruit and table grapes:

Do not harvest for 21 days after application.

Do not graze or cut for stock feed any vegetation contacted by the spray.

Trade advice information:

Treated fruit for export to particular destinations outside Australia may require a longer interval before harvest to comply with residues standards of importing countries. Please contact Sumitomo Chemical Australia or your industry body or exporter before using Paramite Selective Miticide.

4. Overseas registration and approved label instructions

The applicant indicated that etoxazole products are registered for use in the following countries:

Africa: South Africa, Kenya.
Americas: USA, Mexico, Ecuador, Columbia.
Asia & Asia-Pacific: Japan, Korea, Taiwan, Uzbekistan, Turkmenistan.
Europe: Spain, France, Italy, Switzerland, Turkey.
Middle East: Israel, UAE, Iraq.

5. Codex Alimentarius Commission and overseas MRLs

Codex MRLs have not yet been established for etoxazole on pome fruit, stone fruit or table grapes.

According to the applicant, the following relevant overseas residue MRLs/ tolerances for etoxazole have been established:

Country	Commodity	Tolerance, mg/kg
USA	Apple pomace, wet	0.5
	Grape	0.5
	Fruit, pome, group 11	0.2
France	Grape	0.02
	Peach/Apricot	0.1
	Apple/Pear	0.02
South Africa	Apple	0.2
	Pear	0.1
Israel	Apple	0.02

Turkey	Apple	0.1
Korea	Apple/Pear	0.5
Japan	Apple	2
	Pear/Japanese Pear	0.5
	Peach	0.1
Spain	Peach/Apricot	0.1
	Pome fruits	*0.02
Italy	Pome fruits	0.02
	Peach, nectarine, apricot	0.1

6. Proposed Australian MRLs for etoxazole:

The following changes to the Australian MRL standard are proposed for etoxazole:

Table 1

Compound	Food	MRL (mg/kg)	
DELETE:			
Etoxazole	FP 0226	Apple	0.2
	FB 0269	Grapes	T0.3
	FP 0230	Pear	T0.2
	FS 0012	Stone fruits	T0.5
ADD:			
Etoxazole	FP 0009	Pome fruits	0.2
	DF 0269	Dried grapes	0.2
	FB 0269	Grapes	0.1
	FS 0012	Stone fruits [except cherries]	0.1

Table 4

Compound	Animal feed commodity	MRL (mg/kg)	
DELETE:			
Etoxazole	AB 0226	Apple pomace, dry	2
	AB 0269	Grape pomace, dry	T2
ADD:			
Etoxazole	AB 0269	Pome fruit pomace, dry	2
	AB 0269	Grape pomace, dry	1

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

7. Potential Risk to Trade

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

While several overseas countries have established etoxazole MRLs in pome fruit, stone fruit and grapes, some key Australian export markets for these commodities have not. As detectable residues are expected to occur if the product is used as directed this creates a potential risk to trade. The applicant is proposing to mitigate this risk to trade through the inclusion of the following statement on the label:

Treated fruit for export to particular destinations outside Australia may require a longer interval before harvest to comply with residues standards of importing countries. Please contact Sumitomo or your industry body or exporter before using Paramite Selective Miticide.

In relation to apples, the applicant has worked with the industry association (Apple and Pear Australia Ltd) to provide the industry with export harvest interval (EHI) advice. This information has not been communicated on the product label. The applicant and industry association have accepted the responsibility for providing this advice, and the advice does not contradict label instructions. In the consideration of the use of Paramite on apples this approach to mitigating the trade risk was considered to be acceptable. A similar approach has been proposed for pears, stone fruit and grapes.

The relevant industry groups should comment on the perceived level of risk and whether any industry-initiated strategies are required to manage the risk.

The overall risk to export trade in animal commodities is considered to be negligible as no changes are required to the current animal commodity MRLs for etoxazole which are set at the LOQ for each substrate.

8. Conclusions

Detectable residues of etoxazole are likely to occur on pome fruit, stone fruit and table grapes when Paramite Selective Miticide is used as directed. The main Australian export markets for these commodities have not established relevant MRLs. The applicant is proposing to mitigate this risk to trade through the inclusion of a trade advice statement on the label. Users will be advised that fruit for export may require a longer interval before harvest and to seek further advice. Export intervals have been proposed to ensure detectable residues in pome fruit, stone fruit and table grapes are unlikely to occur.

The overall risk to export trade in animal commodities derived from livestock fed pome fruit or grape pomace from treated crops is considered to be negligible as detectable residues are not expected to occur.

Comments are sought on the potential for Paramite Selective Miticide to unduly prejudice Australian export trade when it is used on pome fruit, stone fruit and table grapes to control Two-spotted mite and European red mite.