Australian Government

Australian Pesticides and Veterinary Medicines Authority

Trade Advice Notice

on sulfoxaflor in the product Expedite Full Insecticide for use on faba beans.

APVMA product number 65464.
Label name Transform WG Isoclast active Insecticide.

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This publication is available from the APVMA website.

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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 Transform WG Isoclast active 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 7 August 2025 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 organisation name (if relevant)
- email or postal address (if available)

- the date you made the submission.

Please note: submissions will be published on the APVMA's website, unless you have asked for the submission to remain confidential, or if the APVMA chooses at its discretion not to publish any submissions received (refer to the public consultation coversheet).

Please lodge your submission using the public consultation coversheet, which provides options for how your submission will be published.

Note that all APVMA documents are subject to the access provisions of the *Freedom of Information Act 1982* and may be required to be released under that Act should a request for access be made.

Unless you request for your submission to remain confidential, the APVMA may release your submission to the applicant for comment.

Written submissions should be addressed to:

Executive Director, Risk Assessment Capability
Australian Pesticides and Veterinary Medicines Authority
GPO Box 574
Canberra ACT 2601, Australia

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 Trade Advice Notices can be found on the APVMA website: apvma.gov.au.

Introduction

The APVMA has before it an application from Corteva Agriscience Australia Pty Ltd to vary the registration of Expedite Full Insecticide (Label name Transform WG Isoclast active Insecticide) to include use on faba beans.

The applicant has not submitted any new residues data in support of the application but resubmitted the previously evaluated Australian trial data outlined in a Trade Advice Notice (TAN)[1] in 2016 related to the Residues evaluation of the proposed use of Expedite Full Insecticide (Product No. 65464) on pulses and other crops. At the time of the trade consultation for that application, which proposed a Maximum Residue Limit (MRL) for VD 0070 Pulses [except soya bean (dry)] at 0.7 mg/kg, concern was raised by 2 stakeholders concerning the risk of breaching tolerance levels of export markets. Registration was therefore subsequently restricted to just adzuki beans, mung beans and navy beans, which were the pulse crops covered by the Codex Beans (dry) MRL. It is noted that the currently registered Transform WG Isoclast active Insecticide use patterns on adzuki beans, mung beans and navy beans are the same as that currently proposed for faba beans.

In 2022 Pulse Australia Limited applied for a minor use permit to allow the use of sulfoxaflor on faba beans, for the control of faba bean aphids and green peach aphids. The TAN[2] for this application outlined that although the Codex MRL of 0.3 mg/kg established for dry beans was established based on consideration of the USA GAP [4 applications (2 consecutive) at 80 g a.i./ha, 14 days minimum re-treatment interval and a 7 days pre-harvest interval] which allows use on a number of crops including faba beans, it may only cover Phaseolus species. It was noted however, that the major market for Australian faba beans (Egypt), defers to EU MRLs in the absence of a relevant Codex MRL. This is also the case for the United Arab Emirates, while Saudi Arabia defers to the lower of the EU or USA MRLs. The EU MRL for dry beans at 0.3 mg/kg, which was not established at the time of the residues evaluation of the proposed use of Expedite Full Insecticide on pulses, is established at a level close to the observed HR in Australian pulses (including faba beans). The APVMA received no objections to the proposed use and the minor use permit, PER92758, was approved for use from 6 July 2023 to 31 July 2025.

The applicant has now applied for the use of sulfoxaflor on faba beans to be transferred to registration.

[1] Australian Pesticides and Veterinary Medicines Authority, *Sulfoxaflor in the product Expedite Full Insecticide*, APVMA website, 4 August 2016, accessed 14 February 2025.

[2] Australian Pesticides and Veterinary Medicines Authority, *Sulfoxaflor for use on faba beans*, APVMA website, 21 November 2022, accessed 14 February 2025.

Trade considerations

Commodities exported

Faba beans are considered to be a major export commodity[3], as are commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated faba beans. Residues in these commodities resulting from the use of sulfoxaflor may have the potential to unduly prejudice trade.

No amendments to the current edible animal commodities have been proposed, thus risk to trade arising from animals that have been fed feeds containing sulfoxaflor, remains unchanged to that previously assessed. The risk to trade with respect to the proposed use on faba beans is considered below.

Destination and value of exports

Australian exports of pulses (lupins, field peas, chickpeas, faba beans, mung beans, navy beans and lentils) totalled 1731 kt, 2560 kt, 2956 kt, 3656 kt, and 3699 kt (value $1263 m, $1647 m, $2315 m, $2887 m, and $2972 m), in 2019-20, 2020-21, 2021-22, 2022-23, and 2023-24 respectively [4].

The major markets for faba beans are countries in the Middle East, specifically Egypt, Saudi Arabia and the United Arab Emirates[5].

[3] Australian Pesticides and Veterinary Medicines Authority, *APVMA Regulatory Guidelines – Data Guidelines: Agricultural data guidelines – Pesticides: Overseas trade (Part 5B)*, APVMA website, 20 July 2020, accessed 14 February 2025.

[4] Australian Government, Department of Agriculture, Fisheries and Forestry, Agricultural Commodity Statistics 2023, *Agricultural commodities and trade data - DAFF (agriculture.gov.au)*, accessed 13 February 2025.

[5] Grains Research & Development Corporation, *Faba bean Section A Introduction*, GRDC website, accessed 14 February 2025

Proposed Australian use pattern

Table 1: Proposed use pattern for faba beans being considered by the APVMA

Crop	Pest	Rate/concentration	Critical comments
Faba beans	Aphids (including blue green aphid, cow pea aphid and green peach aphid).	50 g/ha (25 g a.i./ha)	Monitor crops for pest species by regular field scouting. Target sprays against insect populations when they exceed threshold levels. Make repeated applications at 14 - 21 day intervals as new infestations occur unless otherwise directed in the CRITICAL COMMENTS. DO NOT make more than two (2) applications per crop. Ground Spraying (Broadacre crops): Apply in a minimum of 50 L/ha of water, with spray droplets no smaller than medium category according to nozzle manufacturer specifications that refer to the ASAE S-572 Standard. Increase spray volumes as the crop grows. Aerial Spraying (Broadacre arable crops only): Apply in a minimum of 30 L/ha of water with spray droplets no smaller than a medium spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S-572 Standard.

Withholding periods:

Harvest: DO NOT harvest for 14 days after the last application.

Grazing: DO NOT graze or cut for stockfeed for 14 days after application.

Restraints:

DO NOT apply more than two (2) times to canola, cereals, forage brassicas, lucerne and pulses, or four (4) times to cotton and soybean in any one (1) season.

Trade advice:

EXPORT SLAUGHTER INTERVAL (ESI) – 14 days:

After observing the grazing withholding period, livestock that has been grazed on or fed treated crops should be placed on clean feed for 14 days prior to slaughter.

LIVESTOCK DESTINED FOR EXPORT MARKETS

The grazing withholding periods (above) only apply to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that in addition to complying with the grazing withholding period, that the Export Slaughter Interval, is observed before stock are sold or slaughtered.

CROPS FOR EXPORT - Before using Transform® WG on crops destined for export it is essential to consult your exporter or Corteva Agriscience to ensure that an appropriate MRL is in place in the importing country.

Results from residues trials presented to the APVMA

It was noted in the TAN[1] related to the residues evaluation of the proposed use of Expedite Full Insecticide on pulses and other crops that six new Australian trials on field peas, lentils and faba beans are supported by 19 previously submitted overseas trials on soybeans and six on dry beans.

In the Australian trials, residues of sulfoxaflor at harvest 14 days, or later where higher residues were observed, after the last of 2 applications at 24 g ai/ha (1× proposed) were 0.02 and 0.29 mg/kg in field peas, 0.04 and 0.06 mg/kg in lentils, and 0.04 and 0.32 mg/kg in faba beans. The STMR for the combined data set for pulse grains is 0.05 mg/kg. The OECD MRL calculator recommends an MRL of 0.7 mg/kg.

When looking specifically at the Australian faba bean trials, residues of sulfoxaflor in faba bean grain, 14 days after the last of two applications at 24 g ai/ha (1× proposed) were <0.01 and 0.013 mg/kg. After the last of two applications 28 days before harvest grain residues were <0.01 and 0.32 mg/kg, and after the last of two applications at 35 days before harvest grain residues were 0.035 and 0.20 mg/kg.

In trials in the USA and Brazil residues of sulfoxaflor in soybeans at a 7-day harvest interval after 4 applications at 100 g ai/ha (4× proposed) were: <0.01 (8), 0.01, 0.02 (3), 0.03 (2), 0.04 (3), 0.09, and 0.21 mg/kg.

In 6 trials on dry beans in Brazil, Germany and Spain, following 4 applications of sulfoxaflor at a total rate of 0.350 to 0.365 lb a.i./A (~400 g a.i./ha), residues of sulfoxaflor were 0.02, 0.05, 0.09, 0.09, 0.10 and 0.11 mg/kg in/on dried beans harvested at a 7 day PHI.

Based on these data a sulfoxaflor MRL for VD 0071 Beans (dry) was established at 0.7 mg/kg to cover residues arising in adzuki, mung and navy beans from the registered uses.

As the permitted use for PER92758 (equivalent to the proposed use pattern) for sulfoxaflor on faba beans (VD 0523) is the same as and based on the registered uses on adzuki, mung and navy beans, and all 4 crops are members of the APVMA Crop subgroup 015A, Dry beans[6], it was considered appropriate to estimate an MRL for the use on faba beans based on the residues data previously considered for registration of the other 3 crops.

It is noted that under the new APVMA Crop Groups, the MRL for VD 0071 Beans (dry) only covers Phaseolus species and cultivars. As faba beans are classified as *Vicia* rather than *Phaseolus*, it was appropriate to establish a separate (temporary) MRL for VD 0523 Broad bean (dry) at the same level, 0.7 mg/kg, for the proposed use on faba beans.

[6] Australian Pesticides and Veterinary Medicines Authority, *Crop Group 015: Pulses*, APVMA website, accessed 14 February 2025.

It is now proposed that the current temporary MRL for VD 0523 Broad bean (dry) at T0.7 mg/kg be made permanent.

Codex Alimentarius Commission and overseas MRLs

The Codex Alimentarius Commission (Codex) is responsible for establishing Codex Maximum Residue Limits (CXLs) for pesticides and veterinary medicines. 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. Sulfoxaflor has been considered by Codex.

Table 1: Relevant international MRLs for sulfoxaflor on dry beans

Commodity	Tolerance for residues arising from the use of sulfoxaflor (mg/kg)							
	Australia	EU[7]	Codex[8]	Japan[9]	Korea[10]	USA[11]	China[12]	Taiwan[13]
Broad bean (dry)	0.7 (proposed)	–	–	0.2 (Broad beans)	–	–	–	–
Beans (dry)	0.7	0.3 (Beans)*	0.3	0.3	0.2 (Beans)*	0.20*	-	0.3 (Other dry beans except cotton seed and rapeseed)*
Soya bean (dry)	0.3	_	0.3	–		0.20	T0.3	–

*includes faba bean

[7] European Commission, *Pesticide residue(s) and maximum residues levels (mg/kg)*, European Commission website, accessed 14 February 2025.

[8] Food and Agriculture Organization of the United Nations, *Codex Alimentarius: 252 - Sulfoxaflor*, FAO website, accessed 14 February 2025.

[9] Japanese Food Chemistry Research Promotion Foundation, *Table of MRLs for Agricultural Chemicals*, JFCRPF website, accessed 14 February 2025.

[10] Ministry of Food and Drug Safety Korea, *Pesticide MRLs for agricultural commodities*, FSK website, accessed 14 February 2025.

[11] Electronic Code of Federal Regulations, *Tolerances and Exemptions for Pesticide Chemical Residues in Food*, eCFR website, accessed 14 February 2025.

[12] United States Department of Agriculture Foreign Agricultural Service, *China: Maximum Residue Limits for Pesticides in Foods, Global Agricultural Information Network report*, 24 August 2021, accessed 14 February 2025.

[13] Food and Drug Administration Taiwan, *Food and Drug Administration Taiwan, Standards for Pesticide Residue Limits in Foods*, accessed 14 February 2025.

Current and proposed Australian MRLs for sulfoxaflor

Table 3: Current relevant MRLs for sulfoxaflor in Table 1 of the MRL Standard

Compound		Food	MRL (mg/kg)
Sulfoxaflor			
VD	0071	Beans (dry)	0.7
VD	0523	Broad bean (dry) [faba bean (dry)]	T0.7
MO	0105	Edible offal (mammalian)	2
PE	0112	Eggs	*0.01
MM	0095	Meat (mammalian)	0.7
ML	0106	Milks	0.3
PM	0110	Poultry meat	*0.01
PO	0111	Poultry, edible offal of	0.02
VD	0541	Soya bean (dry)	0.3

Table 4: Current relevant MRLs for sulfoxaflor in Table 4 of the MRL Standard

Compound		Food	MRL (mg/kg)
Sulfoxaflor			
		Pulse forage and fodder	5

Table 5: Amendments to Table 1 of the MRL Standard for sulfoxaflor

Compound		Food	MRL (mg/kg)
Sulfoxaflor			
Delete:			
VD	0523	Broad bean (dry) [faba bean (dry)]	T0.7
Add:			
VD	0523	Broad bean (dry)	0.7

Potential risk to trade

Export of treated produce containing finite (measurable) residues of sulfoxaflor 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 use of sulfoxaflor on faba beans requires the establishment of a permanent MRL at 0.7 mg/kg (HR = 0.32 mg/kg, STMR = 0.05 mg/kg from the 6 Australian pulse trials matching the proposed use). There is a potential risk to trade as finite residues of sulfoxaflor may be expected in exported faba beans. The proposed MRL for faba beans is 0.7 mg/kg, which is at the same level as the established Australian Beans (dry) MRL and is higher than the MRLs for dried beans which are established in most overseas markets at 0.2 or 0.3 mg/kg, although it is noted that the STMR of all the Australian pulse data is below these MRL values.

Although the Codex MRL of 0.3 mg/kg established for dry beans was established based on consideration[14] of the USA GAP [4 applications (2 consecutive) at 80 g a.i./ha, 14 days minimum re-treatment interval and a 7 days pre-harvest interval] which allows use on a number of crops including faba beans[15], it may only cover *Phaseolus* species. It is noted however, that the major market for Australian faba beans (Egypt), defers to EU MRLs in the absence of a relevant Codex MRL[16]. This is also the case for the United Arab Emirates[17], while Saudi Arabia defers to the lower of the EU or USA MRLs[18]. The EU MRL for dry beans at 0.3 mg/kg, which was not established at the time of the residues evaluation of the proposed use of Expedite Full Insecticide on pulses, is established at a level close to the observed HR in Australian pulses (including faba beans).

[14] Food and Agriculture Organization of the United Nations, *JMPR 2013 Report (fao.org)*, FAO website, accessed 14 February 2025.

[15] United States Environment Protection Agency, *Label for Transform WG Insecticide Isoclast Active* ,USA EPA website, accessed 14 February 2025.

[16] Northwest Horticultural Council, Washington, USA, *Egypt (nwhort.org)*, Northwest Horticultural Council website, accessed 14 February 2025.

[17] Northwest Horticultural Council, Washington, USA, *United Arab Emirates (nwhort.org)*, Northwest Horticultural Council website, accessed 14 February 2025.

[18] Northwest Horticultural Council, Washington, USA, *Saudi Arabia (nwhort.org)*, Northwest Horticultural Council website, accessed 14 February 2025.

To further mitigate risk the label contains the following statement:
CROPS FOR EXPORT - Before using Transform® WG on crops destined for export it is essential to consult your exporter or Corteva Agriscience to ensure that an appropriate MRL is in place in the importing country.

Additionally, the proposed use in faba bean is equivalent to the use in adzuki beans, mung beans, and navy beans that has been registered since 2016, and is the same as the use pattern permitted under PER92758 since 2023. The National Residue Survey[19] publishes yearly plant product monitoring datasets. In the 2023-24 year 302 faba bean samples were analysed with no detections above half the sulfoxaflor MRL recorded. From 2017-18 to 2023-24, 447 mung bean samples have been analysed with no detections above half the sulfoxaflor MRL recorded.

[19] Department of Agriculture, Fisheries and Forestry, Australia, *National Residue Survey results and publications*, DAFF website, accessed 23 May 2025.

Conclusion

Corteva Agriscience Australia Pty Ltd has applied to vary the registration of Expedite Full Insecticide (Label name Transform WG Isoclast active Insecticide) to include use on faba beans.

Comment is sought on the potential for the proposed use to prejudice Australian trade of faba beans and the ability of industry to manage any potential trade risk.