



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



**Trade Advice Notice**

on halauxifen-methyl in the product Trezac Arylex active Herbicide  
for use on grass pastures

APVMA product number 88180

April 2023

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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 Trezac Arylex active 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 12 May 2023 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:

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**Phone:** +61 2 6770 2300

**Email:** [enquiries@apvma.gov.au](mailto: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](http://apvma.gov.au).

## Introduction

The APVMA has before it an application from Corteva Agriscience Australia Pty Ltd to vary the registration of Trezac Arylex active Herbicide to allow a new boom application use pattern on grass pastures and a variation of withholding period for the registered spot spray uses on grass pastures. The product contains 25 g/L aminopyralid and 30 g/L halauxifen-methyl as the only active constituents and 30 g/L cloquintocet-mexyl as a safener. The rates currently approved for the high volume/spot spray treatment of woody weeds are:

- 200 mL/100L Trezac Arylex active Herbicide and 210 mL/ 100L Starane Advanced Herbicide (P62287, 333 g/L fluroxypyr as the methyl heptyl ester)<sup>1</sup> as per Table 4a on the current product label (88180/120501), which, assuming a spray volume of 3000 L/ha and a maximum weed density of 30% per hectare, is equivalent to 45 g a.i./ha aminopyralid + 54 g a.i./ha halauxifen-methyl + 54 g a.i./ha cloquintocet-mexyl + 630 g a.i./ha fluroxypyr-meptyl.
- 200 mL/100L Trezac Arylex active Herbicide and 300 mL/100L Starane Advanced Herbicide as per Table 4b on the current product label, which, assuming a spray volume of 3,000 L water per hectare and a maximum weed density of 30% per hectare, is equivalent to 45 g a.i./ha aminopyralid + 54 g a.i./ha halauxifen-methyl + 54 g a.i./ha cloquintocet-mexyl + 900 g a.i./ha fluroxypyr-meptyl.

The current grazing withholding period (WHP) for the high-volume treatment/spot spray use is 28 days. The proposed high volume/spot spray treatment of woody weeds is the same as on the current label, except the applicant proposes a 14-day grazing WHP.

In addition, the applicant proposes a boom application use in various pastures at a maximum of 600 mL/ha Trezac Arylex active Herbicide and 630 mL/ha Starane Advanced, which is equivalent to 15 g a.i./ha aminopyralid + 18 g a.i./ha halauxifen-methyl + 18 g a.i./ha cloquintocet-mexyl + 210 g a.i./ha fluroxypyr-meptyl. The proposed grazing WHP for the boom application use is 7 days.

## Proposed use of aminopyralid in Trezac Arylex active Herbicide

The proposed application rates for the use of aminopyralid in Trezac Arylex active Herbicide are no greater than already registered for use on pastures on the Hotshot Herbicide (P59173, 10g/L aminopyralid + 140g/L fluroxypyr, Corteva) label<sup>2</sup>. As the proposed grazing WHPs are longer, no further evaluation of the use of aminopyralid in Trezac Arylex active Herbicide on grass pastures was considered to be necessary from a residues perspective.

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<sup>1</sup> Australian Pesticides and Veterinary Medicines Authority (APVMA), Public Chemical Registration Information System Search, [Starane Advanced Herbicide label \(Product No. 62287\)](#), APVMA website, accessed 4 April 2023.

<sup>2</sup> Australian Pesticides and Veterinary Medicines Authority (APVMA), Public Chemical Registration Information System Search, [Hotshot Herbicide label \(Product No. 59173\)](#), APVMA website, accessed 4 April 2023.

## Proposed use of cloquintocet-mexyl in Trezac Arylex active Herbicide

The proposed uses of Trezac Arylex active Herbicide on grass pastures require the establishment of a cloquintocet-mexyl Grass Pastures MRL at 1.5 mg/kg. However, no changes are required to the MRLs (established at the LOQ) for commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated grass pastures and which are considered to be major export commodities. As no changes are required to these MRLs, the overall risk to trade associated with the proposed use of cloquintocet-mexyl in Trezac Arylex active Herbicide on grass pastures is considered to be low and does not require further consideration.

## Proposed use of fluroxypyr as the methyl heptyl ester in Starane Advanced Herbicide

The proposed uses on pastures include a tank-mix with Starane Advanced Herbicide<sup>1</sup> at shorter grazing WHPs (7 days for boom application and 14 days for the high volume / spot spray treatment of woody weeds) than currently allowed for use as a tank-mix with Trezac Arylex active Herbicide on pastures. As Starane Advanced Herbicide is already registered for use on pastures at higher rates than proposed, with a 7-day grazing WHP, no further consideration of the use of this product was considered to be necessary from a residues perspective.

## Proposed use of halauxifen-methyl in Trezac Arylex active Herbicide

The proposed uses of Trezac Arylex active Herbicide on pastures require an increase to the established halauxifen-methyl Grass Pastures MRL from 0.2 to 2 mg/kg. Consequent to this, a change is required to the established halauxifen-methyl Edible offal (mammalian) MRL from 0.01 to 0.03 mg/kg. Consideration of potential trade implications is necessary for the proposed increase to the halauxifen-methyl Edible offal (mammalian) MRL.

## Trade considerations

### Commodities exported

Commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated grass pastures are considered to be major export commodities<sup>3</sup>. Residues in these commodities resulting from the use of Trezac Arylex active Herbicide may have the potential to unduly prejudice trade.

### Destination and value of exports

The significant export markets for Australian beef, sheep and pig meat and offal are listed in the APVMA Regulatory Guidelines – Data Guidelines: Agricultural - Overseas trade (Part 5B)<sup>3</sup>.

### Proposed Australian use pattern

#### Proposed use pattern for grass pastures being considered by the APVMA

Trezac Arylex active Herbicide (25 g/L aminopyralid + 30 g/L halauxifen-methyl as the only active constituents + 30 g/L cloquintocet-mexyl as a safener).

**Table 4a: Woody weed situations – high volume treatment/spot spray (in all states)**

Agricultural non-crop areas, commercial and industrial areas, forests, grass pastures and rights-of-way			
Weeds controlled	Weed growth stage	Rate/100L water	Critical comments
Fireweed ( <i>Senecio madagascariensis</i> )	Active growth prior to flowering and up to 30 cm tall	200 mL (5 + 6 + 6 g a.i./100L)	DO NOT apply to any woody weeds during flowering.
Thistles, including Spear thistle ( <i>Cirsium vulgare</i> )	Rosette stage prior to stem elongation	+ 210 mL Starane® Advanced	
Lantana ( <i>Lantana camara</i> )	Seedlings and regrowth from 0.5 to 1.2 m high		Apply to actively growing plants from October to April.  Spray to ensure thorough coverage of all foliage, including stems, to the point of runoff.

<sup>3</sup> Australian Pesticides and Veterinary Medicines Authority (APVMA), APVMA Regulatory Guidelines – Data Guidelines: Agricultural - Overseas trade (Part 5B), [Pesticides: Overseas trade \(Part 5B\)](#), APVMA website, accessed 4 April 2023.



Table 4b: Woody weed situations – high volume treatment/spot spray (in all states)

Agricultural non-crop areas, commercial and industrial areas, forests, grass pastures and rights of way			
Weeds controlled	Weed growth stage	Rate/100L water	Critical comments
Lantana ( <i>Lantana camara</i> )	Mature plants and regrowth from 1.2 to 2 m high	200 mL (5 + 6 + 6 g a.i./100L)	LANTANA: Apply to actively growing plants from October to April.  Spray to ensure thorough coverage of all foliage, including stems, to the point of runoff.
Cockspur thorn ( <i>Maclura cochinchinensis</i> )	Up to 3 m high	+ 300 mL Starane® Advanced	DO NOT apply to any woody weeds during flowering.
Creeping lantana ( <i>Lantana montevidensis</i> )	Active growth prior to flowering		
Crofton weed ( <i>Ageratina adenophora</i> )  Mistflower ( <i>Ageratina riparia</i> )	Seedlings and young plants up to flowering		
Docks ( <i>Rumex spp.</i> )	Seedlings and rosettes up to 30 cm high		
Small flowered mallow (Marshmallow) ( <i>Malva parviflora</i> )	Seedlings and young plants up to flowering		
St. John's wort ( <i>Hypericum perforatum</i> )	Early seed set only		Late spring to early summer
Wattles, including <i>Acacia aulacocarpa</i> <i>A. decora</i> <i>A. harpophylla</i> <i>A. leiocalyx</i> <i>A. salicina</i>	Seedling plants or regrowth  0.5 to 1.2 m high		Apply to actively growing plants when soil moisture is plentiful. Some regrowth may occur particularly when treating old woody plants with sparse canopies and under dry conditions.

Table 5: Grass pastures – boom application (in all states)

Established and newly sown grass pastures (including ryegrass, brome, phalaris, cocksfoot and tall fescue)			
Weeds controlled	Weed growth stage	Rate/100L water	Critical comments
Deadnettle ( <i>Lamium amplexicaule</i> ) Mexican poppy ( <i>Argemone mexicana</i> )	2 to 6 leaf	200 mL  (5 + 6 + 6 g a.i./100L)	Legumes present at application will be controlled.  Add Uptake Spraying Oil at 500 mL/100 L water  CAUTION: Recovery after early application, then early grazing, on newly sown phalaris and tall fescue may be slow!
Fireweed ( <i>Senecio madagascariensis</i> )	Seedling plants up to flowering	600 mL  (15 + 18 + 18 g a.i./ha)  + 630 mL  Starane® Advanced	

Withholding periods:

Pasture (when used according to Table 4a & 4b)

Cutting or Grazing Pastures for Stockfood: DO NOT GRAZE CROPS OR CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION.

Pasture (when used according to Table 5)

Cutting or Grazing for Stockfood: DO NOT GRAZE CROPS OR CUT FOR STOCK FEED FOR 7 DAYS AFTER APPLICATION.

Restrictions:

DO NOT apply to weeds which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (water-logged or drought affected), poor nutrition, presence of disease, damage or previous herbicide treatment, as reduced levels of control may result.

DO NOT apply if heavy rains or storms are forecast within 3 days.

DO NOT spray if rain is likely within 1 hour to ensure the product is rainfast.

When spot spraying woody weeds, DO NOT treat more than 10% of any given area in Tasmania, 20% in NSW and 30% in other states and territories; i.e. only treat isolated woody weeds where the total area treated is no more than 1,000 m<sup>2</sup> per hectare in Tasmania, 2,000 m<sup>2</sup> per hectare in NSW and 3,000 m<sup>2</sup> per hectare in other states and territories.

DO NOT apply to flowering woody weeds.

AVOID double overlaps to reduce risk of injury to rotational crops the following season.

#### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT use on land to be cultivated for growing susceptible crops for up to 20 months of applying Trezac®, except where indicated in the MINIMUM RECROPPING PERIODS section of the GENERAL

INSTRUCTIONS. Crops susceptible to Trezac® include, but are not limited to: peas, lupins, lucerne, navy beans, peanuts, soybeans and other legumes, cotton, flowers, fruit, hops, ornamentals, shade trees and Pinus spp., potatoes, safflower, sugar beet, sunflowers, tobacco, tomatoes, vegetables and vines.

Trezac® is damaging to susceptible crops during both growing and dormant periods. Grasses are normally unaffected and establish quickly after treatment.

Halauxifen-methyl and aminopyralid can remain active in the soil for extended periods depending on soil type and application rate, rainfall, temperature, humidity, soil moisture and soil organic matter.

DO NOT apply close to, or in areas, containing roots of desirable vegetation, where treated soil may be washed onto areas growing (or areas to be planted with) desirable plants.

DO NOT apply on sites where surface water from heavy rain can be expected to run off to areas containing, or to be planted with susceptible crops or plants.

DO NOT move soil, which may have been treated to areas where desirable plants are to be grown.

DO NOT apply or drain or flush equipment on or near native or non-target trees or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

Spray drift restraints:

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply by aircraft.

DO NOT apply by a vertical sprayer.

DO NOT apply with spray droplets smaller than a COARSE spray droplet size category according to 'APVMA Compliance Instructions for Mandatory COARSE or Larger Droplet Size Categories' located under this title in the GENERAL INSTRUCTIONS section of this label.

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour as measured at the application site

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands, pastures, waterways or native vegetation. Extreme care must be taken to avoid spray drift outside of the target area in woody weed situations.

Application Methods:

Only apply Trezac® under atmospheric conditions that do not allow drift onto sensitive crops to occur.

Broadcast application in cropping, fallow and grass pasture situations.

#### A. Ground Application (Boom)

Apply Trezac® with an accurately calibrated boom sprayer, in at least 80 L/ha water. Use nozzle configurations rated to produce coarse spray droplet sizes. Boom height must be set to ensure double overlap of nozzle patterns.

Woody weed situations

#### B. High Volume Spot Spraying Applications

Apply the recommended mix of Trezac® + Starane® Advanced to obtain full coverage of leaves and stems using a coarse to very coarse spray droplet sizes. To obtain good coverage, a spray volume of 3000 L water/ha is required per treated hectare. Spray to ensure thorough coverage of all foliage, including stems to the point of runoff.

Trade advice:

Fodder Intended for Export:

Some countries have limits on the level of residue acceptable in animal feeds. Please consult your exporter before using this product on crops destined to be used for export fodder.

Livestock destined for export markets:

The grazing withholding period only applies 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, the Export Slaughter Interval is observed before stock are sold or slaughtered.

Export Slaughter Interval (ESI) – 3 days:

Livestock that has been grazed on or fed treated crop within 42 days of application should be placed on clean feed for 3 days prior to slaughter.

Export Animal Feed Interval (EAFI) – 42 days:

Do not cut treated pasture for 42 days (6 weeks) after application of the chemical product for stock feed or animals intended to be slaughtered for export.

When Trezac® is used as directed and the above withholding periods and/or export intervals are observed, treated grain and livestock commodities are considered acceptable for export. However, export requirements are subject to change. Consult your exporter for updated information about specific market requirements.

## Results from residues trials presented to the APVMA

### Grass pastures

In support of the application, three new European pasture grass studies addressing halauxifen-methyl residues were submitted. Previously submitted Australian/ New Zealand cereal forage residues data for halauxifen-methyl was also considered relevant to the proposed uses on grass pastures.

#### *High volume treatment/spot spray application*

Dry weight residues of halauxifen-methyl in various grasses approximately 14 days after application and after scaling to expected residues at 54 g a.i./ha were, in rank order: ND (fw, 7), 0.06 (2), 0.08, 0.10, 0.11 (2), 0.12, 0.13, 0.19, 0.22, 0.25, 0.31, 0.47, 0.65 and 0.70 mg/kg (STMR = 0.105 mg/kg, n=22).

The OECD MRL calculator estimates an MRL of 1 mg/kg (using a value of 0.01 mg/kg for the unscaled ND fresh weight values).

Dry weight residues of halauxifen-methyl in cereal forage (highest value from each trial) approximately 14 days after application and after scaling to expected residues at 54 g a.i./ha were, in rank order: ND (fw, 3), 0.07, 0.08 (3), 0.09, 0.11, 0.15, 0.16, 0.20, 0.22, 0.23, 0.24, 0.32, 0.35, 0.42, 0.49, 0.78, 0.82, 0.84 and 1.04 mg/kg (STMR = 0.20 mg/kg, n=23).

The OECD MRL calculator estimates an MRL of 1.5 mg/kg (using a value of 0.01 mg/kg for the unscaled ND fresh weight values).

The combined dataset (grass and forage data) suitable for MRL estimation is, in rank order: ND (fw, 10), 0.06 (2), 0.07, 0.08 (4), 0.09, 0.10, 0.11 (3), 0.12, 0.13, 0.15, 0.16, 0.19, 0.20, 0.22 (2), 0.23, 0.24, 0.25, 0.31, 0.32, 0.35, 0.42, 0.47, 0.49, 0.65, 0.70, 0.78, 0.82, 0.84 and 1.04 mg/kg (STMR = 0.12 mg/kg, n=45).

The OECD MRL calculator estimates an MRL of 1.5 mg/kg.

### *Boom application*

Dry weight residues of halauxifen-methyl in various grasses approximately 7 days after application (or later if higher residues were observed) and after scaling to expected residues at 18 g a.i./ha were, in rank order: ND, 0.04 (2), 0.06, 0.07 (4), 0.08, 0.09 (2), 0.10, 0.15, 0.16 (2), 0.20, 0.22, 0.29, 0.31, 0.46, 0.47 and 1.69 mg/kg (STMR = 0.095 mg/kg, n=22).

The OECD MRL calculator estimates an MRL of 2 mg/kg (using a value of 0.01 mg/kg for the unscaled ND fresh weight value).

Dry weight residues of halauxifen-methyl in cereal forage (highest value from each trial) approximately 7 days after application and after scaling to expected residues at 18 g a.i./ha were, in rank order: 0.04, 0.06, 0.07, 0.08, 0.09, 0.11, 0.14, 0.15, 0.18, 0.20, 0.22, 0.27, 0.29, 0.35, 0.42, 0.43, 0.44, 0.49, 0.50 (2), 0.54, 0.55 and 1.07 mg/kg (STMR = 0.27 mg/kg, n=23).

The OECD MRL calculator estimates an MRL of 1.5 mg/kg.

The combined dataset (grass and forage data) suitable for MRL estimation is, in rank order: ND, 0.04 (3), 0.06 (2), 0.07 (5), 0.08 (2), 0.09 (3), 0.10, 0.11, 0.14, 0.15 (2), 0.16 (2), 0.18, 0.20 (2), 0.22 (2), 0.27, 0.29 (2), 0.31, 0.35, 0.42, 0.43, 0.44, 0.46, 0.47, 0.49, 0.50 (2), 0.54, 0.55, 1.07 and 1.69 mg/kg (STMR = 0.16 mg/kg, n=45).

The OECD MRL calculator estimates an MRL of 2 mg/kg.

### Summary

Based on the available residues data it is recommended that the current halauxifen-methyl MRL for Grass pastures at 0.2 mg/kg should be changed to 2 mg/kg for the proposed uses on grass pastures, in conjunction with the proposed 14 day grazing WHP for spot spray application and 7 day grazing WHP for boom application.

### Crop rotation

Based on available crop rotation studies, residues of halauxifen-methyl are unlikely to be detected in crops planted in rotation with pasture treated with the proposed use. Residues related plant-back intervals are not required for halauxifen-methyl.

### Animal commodities

The estimated maximum livestock burden for halauxifen-methyl is 1.69 ppm for beef and dairy cattle (consumption of 100% grass forage).

The residue definition for halauxifen-methyl in animal commodities is metabolite X11449757, expressed as parent halauxifen-methyl. Based on consideration of a previously submitted feeding study, in which lactating Friesian/ Holstein dairy cows were dosed orally for 28 consecutive days *via* a compound feed containing halauxifen-methyl at 0 ppm, 1.06 ppm, 3.16 ppm, and 15.31 ppm, predicted residues of X11449757 in tissues and milk as a result of feeding at this level, is calculated below based on extrapolation from highest residues observed in the feeding study after feeding at 3.16 ppm.

### Estimated residues in cattle tissues and milk and required MRLs

Feeding level (ppm)	Milk	Muscle	Liver	Kidney	Fat
	X11449757 residue as parent equivalents (mg/kg)				
3.16 (feeding study)	<0.003	<0.003	0.045	0.024	<0.003
1.69 – beef and dairy cattle, estimated burden	<0.01	<0.01	0.024	0.013	<0.01
Established MRLs	*0.01 (milks)	*0.01 (meat)	0.01 (offal)		–
Recommended MRLs	–	–	0.03 (offal)		–

The above calculations indicate that quantifiable residues of the metabolite X11449757 (definition for animal commodities for halauxifen-methyl in Australia) will be present in liver and kidney after feeding for 29 consecutive days, which are above the established MRL.

The following MRL change is therefore recommended:

- MO 0105 Edible offal (Mammalian) 0.03 mg/kg (replacing the current MRL at 0.01 mg/kg).

The established MRLs for ML 0106 Milks and MM 0095 Meat (mammalian) at \*0.01 mg/kg remain appropriate for the proposed use patterns.

The applicant has proposed the following export slaughter interval (which is on the current label for Trezac Arylex active Herbicide):

- Export slaughter interval (ESI) – 3 days
- Livestock that has been grazed on or fed treated crops within 42 days of application should be placed on clean feed for 3 days prior to slaughter.

Depuration data from the feeding study generated using the 12 cows in the 15.31 ppm dose level showed that residues of X11449757 declined rapidly in liver and kidney following withdrawal of the test items from the cows' diet. All residues were below the LOQ by Day 31 of the study (3 days of depuration) and, at that time, all other residue values were ND (<0.003 mg/kg) by 3 days of depuration (except for liver from one cow with a detectable residue that was <LOQ (residue of 0.004 mg/kg halauxifen-methyl equivalents).

The proposed 3 days ESI will therefore ensure that residues of X11449757 in the liver of livestock for export, which were previously fed on grass forage, will be below quantifiable levels and is considered to be appropriate for the proposed use pattern.

The draft label has the following Export Animal Feed Interval (EAFI).

“Do not cut treated pasture for 42 days (6 weeks) after application of the chemical product for stock feed or animals intended to be slaughtered for export”.

This is the same EAFI as on the current label for Trezac Arylex active Herbicide and on the label for the aminopyralid containing product Hotshot Herbicide (P59173).

In the submitted grass trials, halauxifen-methyl residues were observed to decline steadily and rapidly over time. After application at 9.5 to 10.8 g a.i./ha, residues in various grasses ranged from ND – 0.15 mg/kg at 10 to 16 DAA, with half-lives ranging from 0.7 to 3.8 days (median = 2.2 days, n = 23). It is also noted that no detectable residues of halauxifen-methyl were observed in grass straw 34-36 days after application (n = 3) or at later timings (50-84 DAA, n = 4).

The available grass trials indicate that the proposed 42-day EAFI should ensure no residues of halauxifen-methyl would be present in pasture and therefore also ensure no quantifiable residues in the offal of animals grazing treated crops.

## Overseas registration and approved label instructions

The applicant has not supplied information concerning relevant overseas registrations or approved label instructions.

## 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. Halauxifen-methyl has not been considered by Codex.

The European Union (EU) has established MRLs for Liver, Kidney and Edible offals (other than liver and kidney) at \*0.02 mg/kg<sup>4</sup>. The residue definition in the EU is the sum of halauxifen-methyl and X11393729 (halauxifen), expressed as halauxifen-methyl.

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<sup>4</sup> European Commission, [EU Pesticide residue\(s\) and maximum residue levels \(mg/kg\)](#), European Commission website, accessed 1 February 2023.



No relevant halauxifen-methyl MRLs have been established by the USA<sup>5</sup> or in China<sup>6</sup>. Halauxifen-methyl MRLs have not been established by Korea<sup>7</sup>, Japan<sup>8</sup> or Taiwan<sup>9</sup>.

## Current and proposed Australian MRLs for halauxifen-methyl

### Current relevant MRLs for halauxifen-methyl in Table 1 of the MRL Standard

Compound	Food	MRL (mg/kg)
Halauxifen-methyl		
MO 0105	Edible offal (mammalian)	0.01
PE 0112	Eggs	*0.01
MM 0095	Meat (mammalian)	*0.01
ML 0106	Milks	*0.01
PM 0110	Poultry meat	*0.01
PO 0111	Poultry, edible offal of	*0.01

### Amendments to Table 1 of the MRL Standard for halauxifen-methyl

Compound	Food	MRL (mg/kg)
Halauxifen-methyl		
Delete:		
MO 0105	Edible offal (mammalian)	0.01
Add:		
MO 0105	Edible offal (mammalian)	0.03

<sup>5</sup> Electronic Code of Federal Regulations, [Tolerances and Exemptions for Pesticide Chemical Residues in Food](#), eCFR website, accessed 1 February 2023.

<sup>6</sup> 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 1 February 2023.

<sup>7</sup> FSK website, Ministry of Food and Drug Safety Korea, [Pesticide MRLs for agricultural commodities](#), FSK website, accessed 1 February 2023.

<sup>8</sup> Japanese Food Chemistry Research Promotion Foundation, [Table of MRLs for Agricultural Chemicals](#), JFCRPF website, accessed 1 February 2023.

<sup>9</sup> Food and Drug Administration Taiwan, [Food and Drug Administration, Standards for Pesticide Residue Limits in Animal Products](#), accessed 1 February 2023.

## Current relevant MRLs for halauxifen-methyl in Table 4 of the MRL Standard

Compound	Food	MRL (mg/kg)
Halauxifen-methyl		
	Grass pastures	0.2
	Primary feed commodities {except Forage of cereal grains (green), Grass pastures; Straw and fodder (dry) of cereal grains}	1

## Amendments to Table 4 of the MRL Standard for halauxifen-methyl

Compound	Food	MRL (mg/kg)
Halauxifen-methyl		
Delete:		
	Grass pastures	0.2
Add:		
	Grass pastures	2

## Potential risk to trade

## Edible offal

The proposed use of halauxifen-methyl in the product Trezac Arylex active Herbicide on grass pastures, requires an increase to the MRL for halauxifen-methyl in edible offal, from 0.01 mg/kg to 0.03 mg/kg leading to a potential risk to trade, as major overseas markets do not have appropriate halauxifen-methyl MRLs established.

Based on the results of a previously submitted dairy cow feeding study, the proposed 3 days ESI will ensure that residues of X11449757 (as well as halauxifen-methyl and halauxifen) in the liver and kidney of livestock for export, which were previously fed on grass forage, will be below quantifiable levels.

The submitted grass trials indicate that the proposed 42 day EAFI should ensure no quantifiable residues of halauxifen-methyl would be present in pasture and therefore also ensure no quantifiable residues in the offal of animals grazing treated crops. This should provide an additional management option for managing the risk to trade in offal.

## Conclusion

Corteva Agriscience Australia Pty Ltd has applied to vary the registration of Trezac Arylex active Herbicide to allow a new boom application use pattern on grass pastures and a variation of withholding period for the registered spot spray uses on grass pastures. Comment is sought on the potential for the proposed new uses of halauxifen-methyl on grass pastures to prejudice Australian trade of mammalian animal commodities.