

Product Name: REFLEX Herbicide
APVMA Approval No: 88509/140777



Label Name:	REFLEX Herbicide
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Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	240 g/L FOMESAFEN
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Mode of Action:	GROUP 14 HERBICIDE
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Statement of Claims:	For the control of a range of broadleaf weeds when applied prior to sowing or post-sowing, pre-emergence in Chickpeas, Narrow Leaf Lupins, Lentils, Field Peas, Faba Beans and Vetch
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Net Contents:	5 - 1000 L
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Restraints:	This section contains file attachment.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	Grazing: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 12 WEEKS AFTER APPLICATION Harvest: NOT REQUIRED WHEN USED AS DIRECTED
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Trade Advice:	EXPORT SLAUGHTER INTERVAL: NOT REQUIRED WHEN USED AS DIRECTED
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General Instructions:	This section contains file attachment.
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Resistance Warning:	Resistant Weeds Warning - GROUP 14 HERBICIDE REFLEX® Herbicide is a member of the diphenyl ethers group of herbicides within the inhibition of protoporphyrinogen oxidase mode of action. For weed resistance management, REFLEX® is a Group 14 herbicide. Some naturally occurring weed biotypes resistant to REFLEX® and other Group 14 herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by REFLEX® or other Group 14 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Syngenta Australia Pty Ltd accepts no liability for any losses that may result from the failure of REFLEX® to control resistant weeds.
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Precautions:	
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Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.
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Storage and Disposal:	Store in the closed, original container in a dry, cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. For non-refillable containers: Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product. For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of storage for refill or storage.
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Safety Directions:	Will damage the eyes. May irritate the skin. Avoid contact with eyes and skin. If product in eyes immediately wash it out with water. When preparing spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length chemical-resistant gloves and goggles. Wash hands after use. After each day's use, wash goggles, gloves and contaminated clothing.
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First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131 126. If in eyes wash out immediately with water.
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First Aid Warnings:	
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Restraints

DO NOT apply by aircraft
DO NOT apply if heavy rains or storms are forecast within 3 days
DO NOT irrigate to the point of runoff for at least three days after application
DO NOT apply after crop emergence
DO NOT apply more than 1.5 L/ha in a single season
DO NOT apply more than 750 mL/ha on soils that have low organic carbon (0.5% to 1.5% organic carbon) and/or lighter texture, to reduce the risk of injury of following crops
DO NOT apply REFLEX® on soils that have very low organic carbon (less than 0.5% organic carbon), to reduce the risk of injury of following crops

Spray Drift Restraints

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

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

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the buffer zone table below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a MEDIUM spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas are observed (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers').

Buffer zones for boom sprayers

Application Rate	Boom Height Above the Target Canopy	Mandatory Downwind Buffer Zones			
		Natural Aquatic Areas	Pollinator Areas	Vegetative Areas	Livestock Areas
Up to 1500 mL/ha	0.5 m or lower	15 metres	0 metres	30 metres	0 metres
	1.0 m or lower	50 metres	0 metres	70 metres	0 metres
Up to 750 mL/ha	0.5 m or lower	5 metres	0 metres	15 metres	0 metres
	1.0 m or lower	30 metres	0 metres	45 metres	0 metres

DIRECTION FOR USE

Crop	Weeds	Rate	Critical Comments
When applied prior to sowing: Chickpeas, Faba Beans, Field Peas, Narrow Leaf Lupins, Vetch	Suppression of: Bifora, Black Mustard, Indian Hedge Mustard, Milk thistle / Sowthistle, Prickly Lettuce, Slender Celery, Wild Radish, Wild Turnip, Wireweed	500 to 750 mL/ha	Apply REFLEX® at a single timing, either incorporated by sowing or post-sowing, pre-emergent. Use the higher rate where longer residual control is required or higher weed densities are expected.
	Control of: Bifora, Black Mustard, Deadnettle, Indian Hedge Mustard, Milk thistle / Sowthistle, Prickly Lettuce, Wild Radish, Wild Turnip, Wireweed	750 to 1500 mL/ha	To reduce the risk of injury of following crops on soils with low organic carbon (0.5% to 1.5% organic carbon) and/or lighter texture, use a maximum rate 750 mL/ha REFLEX®. Avoid soil throw into adjacent seeding rows or sites where furrow walls may collapse.
	Suppression of: Capeweed, Crassula, Dense-flower Fumitory, Double Gee / Spiny Emex, Fleabane, Jersey Cudweed, Slender Celery, Toad Rush		To reduce the risk of adverse crop effects, refer to Crop Safety in GENERAL INSTRUCTIONS.
When applied post-sowing, pre-emergent: Chickpeas, Faba Beans. Field Peas, Narrow Leaf Lupins	Suppression of: Black Mustard, Dense-flower Fumitory, Indian Hedge Mustard, Wild Radish, Wild Turnip, Wireweed	500 to 900 mL/ha	On sandy soils and especially where furrow wall collapse occurs, higher use rates may result in transient bronzing or flecking of cotyledons. The crop will generally recover as long as seasonal conditions are conducive to strong crop growth.
	Control of: Black Mustard, Deadnettle, Dense-flower Fumitory, Indian Hedge Mustard, Wild Radish, Wild Turnip, Wireweed	900 to 1250 mL/ha	REFLEX® can be tank mixed with simazine, Spinnaker*, Terbyne* Xtreme*, Balance*, diuron or metribuzin where additional weed control is required. Label guidelines for the tank mix products must be adhered to. Extended periods without rainfall after the application of REFLEX® have the potential to reduce the level of efficacy achieved, particularly if a weed germination occurs prior to the dry conditions.
	Control of: Milk thistle / Sowthistle, Prickly Lettuce, Suppression of: Fleabane, Slender Celery	500 to 1250 mL/ha	
	Suppression of: Bifora, Capeweed, Crassula, Double Gee / Spiny Emex, Toad Rush	900 to 1250 mL/ha	

Crop	Weeds	Rate	Critical Comments
When applied post-sowing, pre-emergent: Vetch	<p>Control of: Milk thistle / Sowthistle, Prickly Lettuce,</p> <p>Suppression of: Black Mustard, Dense-flower Fumitory, Fleabane, Indian Hedge Mustard, Slender Celery, Wild Radish, Wild Turnip, Wireweed</p>	500 to 900 mL/ha	<p>Use the higher rate where longer residual control is required or higher weed densities are expected.</p> <p>To reduce the risk of injury of following crops on soils with low organic carbon (0.5% to 1.5% organic carbon) and/or lighter texture, use a maximum rate 750 mL/ha REFLEX®.</p> <p>Crop safety with REFLEX® is dependent on good separation between the herbicide treated soil and planted seed. To reduce the risk of adverse crop effects, refer to Crop Safety in GENERAL INSTRUCTIONS.</p>
	<p>Control of: Black Mustard, Deadnettle, Dense-flower Fumitory, Indian Hedge Mustard, Milk thistle / Sowthistle, Wild Radish, Wild Turnip, Wireweed</p> <p>Suppression of: Bifora, Capeweed, Crassula, Double Gee / Spiny Emex, Fleabane, Slender Celery, Toad Rush</p>	900 mL/ha	<p>Vetch can occasionally show crop injury that appears as bleaching, bronzing or flecking on the leaves. In general, the crop will recover, as long as seasonal conditions are conducive to strong crop growth.</p> <p>Extended periods without rainfall after the application of REFLEX® have the potential to reduce the level of efficacy achieved, particularly if a weed germination occurs prior to the dry conditions.</p>

Crop	Weeds	Rate	Critical Comments
When applied prior to sowing: Lentils	Suppression of: Bifora, Black Mustard, Indian Hedge Mustard, Milk thistle / Sowthistle, Prickly Lettuce, Slender Celery Wild Radish, Wild Turnip, Wireweed	500 to 750 mL/ha	Use the higher rate where longer residual control is required or higher weed densities are expected. To reduce the risk of injury of following crops on soils with low organic carbon (0.5% to 1.5% organic carbon) and/or lighter texture, use a maximum rate 750 mL/ha REFLEX®.
	Control of: Bifora, Black Mustard, Indian Hedge Mustard, Milk thistle / Sowthistle, Prickly lettuce, Wild Radish, Wild Turnip, Wireweed Suppression of: Capeweed, Crassula, Double Gee / Spiny Emex, Deadnettle, Dense-flower Fumitory Fleabane, Jersey Cudweed, Slender Celery, Toad Rush	750 to 1000 mL/ha	Lentils can occasionally show crop injury that appears as bronzing or flecking on the leaves. In general, the crop will recover as long as seasonal conditions are conducive to strong crop growth. Crop safety with REFLEX® is dependent on good separation between the herbicide treated soil and planted seed. To reduce the risk of adverse crop effects, refer to Crop Safety in GENERAL INSTRUCTIONS. Avoid soil throw into adjacent seeding rows or sites where furrow walls may collapse. Extended periods without rainfall after the application of REFLEX® have the potential to reduce the level of efficacy achieved, particularly if a weed germination occurs prior to the dry conditions.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

GENERAL INSTRUCTIONS

REFLEX® Herbicide is a soil applied, residual herbicide that controls a wide range of broad leaved weeds. It can be applied in one of two ways.

1. A maximum of 7 days prior to a crop being sown and incorporated by the sowing action.
2. Applied to the soil surface after crop sowing but prior to crop emergence. The maximum interval between sowing and application is 10 days.

The herbicide is absorbed through the roots of the target weeds and affected plants will exhibit necrosis before finally being controlled. The active ingredient is slightly soluble in nature and may, depending on soil texture, soil organic matter and rainfall patterns, redistribute through the soil profile. However, to maximise efficacy, attention should be paid to incorporation at the time of seeding to ensure that the herbicide treated soil is distributed evenly, with soil clods minimised.

Incorporation and tillage

REFLEX® should only be used in knife point and press wheel seeding system when applied prior to sowing the crop. When applied at a post-sowing pre-emergent timing, REFLEX® may be applied following either a knife point press wheel or disc seeding system.

Wide, conventional or sweep points will substantially reduce the efficacy achieved with REFLEX® due to dilution of the herbicide through the surface soil layer. Likewise, the use of harrows of any type following the seeding operation will also dramatically reduce weed control.

Tillage at any point between the harvest of the prior crop and the planting of the pulse crop treated with REFLEX® is likely to result in reduced efficacy.

Crop Safety

Crop selectivity is achieved through separation of the seed from the herbicide band. Planting equipment should be set up to ensure adequate physical separation is achieved between seed and the herbicide band.

In Lentils, care should be taken to ensure that treated soil is not dragged back into the seeding furrow at the time of crop planting. Press wheels are important to ensure the furrow wall soil is pressed firmly into place to reduce furrow collapse. Harrows of any type should not be used after the seeding operation. Rolling can occur, but caution should be employed on light, sandy soils that are more prone to soil movement into the furrow.

Mixing

The recommended rate of REFLEX® should be added to the spray tank after granular tank-mix partners (if used) are fully dissolved and in suspension. Good agitation should take place to ensure adequate mixing.

Adjuvants

An adjuvant is not required for the use of REFLEX®.

Water Rate

A water volume of not less than 50 L/ha or higher is required for the use of REFLEX®.

Clean up

Thoroughly clean the sprayer using the following procedure when you have finished spraying.

1. Drain and flush tank, boom and all hoses for several minutes with clean water containing a household detergent.
2. Fill the sprayer tank with clean water and add one litre of household ammonia (containing 3% ammonia) per 100 litres of water. Allow the solution to agitate for 15 minutes prior to flushing the solution through the boom and nozzles. Drain the system.
3. Remove the nozzles and screens and wash separately in a bucket containing the ammonia solution.
4. Thoroughly rinse the tank, hoses, booms, nozzles and screens with clean water for a minimum of 5 minutes to remove all traces of ammonia.

Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using this procedure. Wear appropriate protective clothing.

Re-cropping Intervals

The following re-cropping intervals should be observed between the application of REFLEX® at 1500 mL/ha and the planting of a following crop. Lower use rates will reduce any following crop responses noted, though the same re-cropping interval and rainfall thresholds apply.

Crops	Re-cropping Interval	Required Rainfall
Wheat, Oats, Durum Wheat, Chickpeas, Field Peas, Faba Beans, Lupins, Vetch, Lentils	9 months	250 mm
Sub Clover, Medic, Canola, Barley **	9 months	250 mm
Cotton, Mung Beans	3 months	75 mm
Sorghum, Maize	Please contact your Syngenta representative for further information	

**** In some instances, reduced biomass or vigour may be noted in Barley, Canola, Sub Clover and Medics. However, the effect will resolve under good growing conditions and will be unlikely to translate to yield loss.**

To reduce the risk of injury of following crops on soils with low organic carbon (0.5% to 1.5% organic carbon) and/or lighter texture, use a maximum rate of 750 mL/ha REFLEX®.

DO NOT use REFLEX® on soils that have very low organic carbon (less than 0.5% organic carbon), to reduce the risk of injury of following crops.