

Product Name: TRIATHLON HERBICIDE  
APVMA Approval No: 68602/142314

Label Name:	TRIATHLON HERBICIDE
Signal Headings:	DANGEROUS POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	<p>ACTIVE CONSTITUENTS: 250 g/L MCPA present as the ETHYL HEXYL ESTER 150 g/L BROMOXYNIL present as the OCTONOATE 25 g/L DIFLUFENICAN</p> <p>SOLVENTS: 150 g/L N-METHYL-2-PYRROLIDONE (formulation A) 175 g/L N-METHYL-2-PYRROLIDONE (formulation B) 175 g/L LIQUID HYDROCARBON (formulation B)</p>
Mode of Action:	GROUP 4   6   12 HERBICIDE
Statement of Claims:	<p>Crops/Situations: Winter cereals and pasture</p> <p>Controls/Suppresses: Certain broadleaf weeds as per the Directions for Use</p>
Net Contents:	5 L to 1000 L
Restraints:	<p>DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions. DO NOT apply to crops under stress due to disease or insect damage. DO NOT apply to frost-affected crops or if frosts are imminent. DO NOT apply when heavy rain is expected within 4 hours. DO NOT apply with crop oils. DO NOT apply as a broadcast spray by spraying equipment carried on the back of the user.</p> <p>SPRAY DRIFT RESTRAINTS Specific definitions for terms used in this section of the label can be found at <a href="http://apvma.gov.au/spraydrift">apvma.gov.au/spraydrift</a></p>

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. 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 COARSE spray droplet size category
- Minimum distances between the application site and downwind sensitive areas are observed (see the 'Mandatory buffer zone' section of the following table titled 'Buffer zones for boom sprayers').

Table 1. Buffer zones for boom sprayers

Application rate and tank mix combination	Boom height above the target canopy	Mandatory downwind buffer zone		
		Natural aquatic areas	Pollinator areas	Vegetation areas
PRIORITY® + Triathlon®	0.5 m or lower	25 metres	0 metres	50 metres
	1.0 m or lower	60 metres	0 metres	150 metres

DO NOT apply by an aircraft unless the following requirements are met:  
• Spray droplets are not smaller than a COARSE spray droplet size category  
• For maximum release height above the target canopy of 3 m or 25% of wingspan or 25% of rotor diameter, whichever is the greatest, minimum distances between the application site and downwind sensitive areas are observed (see the 'Mandatory buffer zone' section of the following table titled 'Buffer zones for aircraft').

Table 2. Buffer zones for aircraft

Application rate and tank mix combination	Type of aircraft	Mandatory downwind buffer zone		
		Natural aquatic areas	Pollinator areas	Vegetation areas
PRIORITY® + Triathlon®	Fixed Wing	220 metres	0 metres	625 metres
	Helicopter	150 metres	0 metres	300 metres

Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	WITHHOLDING PERIODS HARVEST: NOT REQUIRED WHEN USED AS DIRECTED. GRAZING: DO NOT GRAZE OR CUT FOR STOCK FOOD WITHIN 8 WEEKS AFTER APPLICATION.
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Trade Advice:	
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General Instructions:	GENERAL INSTRUCTIONS CROP TOLERANCE CEREALS: After application some transient crop yellowing may occur. This usually appears as yellow or white banding on leaves. Provided the crop is not under stress from pre-emergent herbicide, root disease, insect damage, frost, dry or excessively moist conditions, the development of the crop and subsequent growth will be unaffected.
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Warning (Oats): The tolerance of all oat varieties to TRIATHLON® has not been tested. Test a small area of crop before using TRIATHLON® over large areas of the varieties with which you don't have experience.

PASTURE: The tolerance of clover varieties to TRIATHLON® can vary with rate of application, soil type, crop health, stage of growth and degree of moisture and temperature stress. If maximum temperatures are predicted to be above 20°C during and up to a week after application, delay application or use an alternative herbicide if weeds are getting too mature.

Warning: TRIATHLON® may result in transient crop yellowing and suppression of growth with a resultant initial reduction in dry matter, particularly at rates in excess of 500 mL/ha and in areas of double spray. For this reason, we recommend application prior to the 8 trifoliate leaf stage. However, at the lower rates (500 mL/ha and less) and under normal growing conditions, subsequent growth and seed yield should not be affected. Under normal growing conditions, the following varieties have shown acceptable levels of foliage tolerance to TRIATHLON® applied at 500 mL/ha:

Arrowleaf: Zulu

Balansa: Bolta, Paradana

Berseem#: Sacromonte

Persian#: Kyambro, Laser, Lupers, Maral

Red#: Astrid

White: Haifa, Storm

Subterranean Clover: Esperance, Goulburn, Larissa, Napier, Seaton Park, Trikkala.

#Berseem, Persian and Red clovers are less tolerant to TRIATHLON®. An application rate not greater than 500 mL/ha after the third trifoliate leaf stage is recommended for these varieties to reduce the crop effects.

Warning: Rose and Strawberry Clover have shown increased sensitivity to TRIATHLON®. TRIATHLON® may affect the seed yield of Subterranean Clover variety Woogenellup.

Some pasture grasses, including Phalaris and Cocksfoot, may show some initial reduction in vegetative growth after application of TRIATHLON®. Care should be exercised if sensitive clover varieties or grasses are included in the pasture sward.

DO NOT apply to annual medics or lucerne. Varieties not listed should be tested before using TRIATHLON® over large areas.

Some pre-emergence herbicides, such as atrazine, can cause stress to certain crops resulting in an increase in crop damage when using this product. Subterranean clover is particularly sensitive.

#### MIXING

To ensure even mixing, half fill the spray tank with clean water and add the required amount of product. Agitate thoroughly then add the remainder of the water. Agitate again before spraying commences. Reseal part-used product container immediately after use. Spray mixtures containing TRIATHLON® should not be left to stand overnight. Prolonged periods of exposure to cold temperatures could result in settling out of the product in the mixture.

#### WARNING

The rubber components present in some spraying units may be affected by exposure to the solvents in TRIATHLON® and some other agricultural products. To reduce this risk it is recommended that the spray unit be thoroughly washed with a boom cleaner and fresh water after use. Contact the spray unit manufacturer to determine the suitability of the rubber components for use with agricultural products.

	<p><b>COMPATIBILITY</b></p> <p>DO NOT use crop oils with TRIATHLON® or TRIATHLON® tank mixtures with other products in cereals. As formulations of other manufacturer's products are beyond the control of ADAMA Australia, all mixtures should be tested prior to mixing commercial quantities.</p> <p><b>APPLICATION</b></p> <p>Boom Sprayer: A minimum of 50 L of water per hectare should be used, however, for optimum results water rates of 70-100 L/ha are recommended. Increase the water volume if weed infestation is heavy or crop cover is dense. Complete coverage of weeds is essential.</p> <p>Aircraft: Apply in a minimum of 30 L water per hectare. Effective weed control will only be achieved where good coverage of leaf surface is achieved.</p>
Resistance Warning:	<p><b>RESISTANT WEEDS WARNING</b></p> <p>TRIATHLON® Herbicide is a member of the nicotinilide, nitrile and phenoxy groups of herbicides and acts by inhibiting carotenoid biosynthesis at the phytoene desaturase step (PDS inhibitors), inhibiting photosynthesis at photosystem II (PS II inhibitors) and disrupting plant cell growth. For weed resistance management TRIATHLON® is a Group 4, Group 6 and Group 12 herbicide. Some naturally occurring weed biotypes resistant to TRIATHLON® and other Group 4, 6 and 12 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 TRIATHLON® or other Group 4, 6 or 12 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, ADAMA AUSTRALIA Pty. Ltd. accepts no liability for any losses that may result from the failure of TRIATHLON® to control resistant weeds.</p>
Precautions:	<p><b>RE-ENTRY</b></p> <p>Do not allow entry into treated area until spray has dried. If prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.</p>
Protections:	<p><b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</b></p> <p>DO NOT apply under weather conditions, or from spraying equipment, that may cause drift onto nearby susceptible plants/crops, cropping lands or pastures. Avoid spray drift and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals.</p> <p><b>PROTECTION OF LIVESTOCK</b></p> <p>Grazing Precaution: Sprayed weeds may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning.</p> <p>Care should be taken especially where Capeweed, Paterson's Curse and variegated thistles predominate in the pasture. Avoid grazing with young or breeding stock.</p> <p>DO NOT graze horses or pigs on Paterson's Curse. If in doubt, contact your nearest Department of Agriculture.</p> <p><b>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</b></p> <p>Dangerous to fish. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.</p>

Storage and Disposal:	<p><b>STORAGE AND DISPOSAL</b>  This product must be stored in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers.</p> <p>Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately.</p> <p>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.</p> <p>Returnable container with Micro Matic Valve (60L, 110 L): Store the original sealed container in a cool well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the container with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the container have been used, please contact Schutz on 03 9360 9291 to arrange collection.</p> <p>1000L: Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use, then the integrity of this product cannot be assured. If this occurs ADAMA AUSTRALIA should be advised immediately.</p> <p>DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and contact Schutz on 03 9360 9291 to arrange collection. No other liquid, solid or pesticide product should be put into it.</p>
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Safety Directions:	<p><b>SAFETY DIRECTIONS</b>  Product is harmful if inhaled or swallowed. May irritate the skin. Will irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with the eyes and skin. Avoid inhaling vapour and spray mist.</p> <p>When opening the container and preparing spray wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves, goggles and half face piece respirator.</p> <p>If applying by boomspray or aerial spraying equipment, wear cotton overalls, buttoned to the neck and wrist (or equivalent clothing) and gauntlet-length chemical resistant gloves.</p> <p>If product in eyes wash it out immediately with water.</p> <p>Wash hands after use.</p> <p>After each day's use wash gloves, goggles, and respirator (if rubber wash with detergent and warm water) and contaminated clothing.</p>
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First Aid Instructions:	<p><b>FIRST AID</b>  If poisoning occurs, contact a doctor or Poisons Information Centre.  Phone Australia 13 11 26. If swallowed, do NOT induce vomiting. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.</p>
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First Aid Warnings:	
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## DIRECTIONS FOR USE

### CRITICAL COMMENTS

#### WARNING

Temperatures above 20°C during and up to a week after application can significantly increase crop and pasture effects.

**Before applying TRIATHLON<sup>®</sup>, refer to the "Crop Tolerance" section of the General Instructions.**

**Cereals:** TRIATHLON<sup>®</sup> may cause transient crop effects/yellowing of cereals, with oats being potentially most sensitive. Higher rates may reduce the biomass of oaten hay crops.

**Pastures:** TRIATHLON<sup>®</sup> may cause transient crop yellowing of clover, and may affect growth and seed set of some varieties of clover.

#### CROP STAGE

**Cereals:** Apply from 3 leaf to fully tillered stage - Z13 to 30. Optimum results are achieved when sprayed at 3-5 leaf crop stage (generally 4-8 weeks post sowing) and before the crop canopy begins to close.

**Clover:** Application is recommended after the third trifoliate to the eighth trifoliate leaf stage and up to early tillering (less than 4 tillers of cereal crop). Application prior to the third leaf stage may result in crop damage, especially under stressed conditions and in sandy soils. Lower rates are safer for early applications before 3 trifoliate stage.

DO NOT apply to annual medics or lucerne.

#### WEED STAGE

Apply when weeds are actively growing. In most situations, the rate specified for each weed size will give satisfactory control. Under certain conditions such as:

- \* high crop and weed density
- \* late season germinations
- \* abnormal weed growth (including early flowering), higher rates of product (up to the maximum rate of application specified for that weed) may be required.

TRIATHLON<sup>®</sup> will not effectively control:

- \* regrowth of suppressed weeds;
- \* transplanted weeds;
- \* regrowth from rhizomes or roots;
- \* weeds growing under stress from previous herbicide applications.

**Table 3:** Weeds controlled or suppressed in **Cereals - Wheat, barley, oats, triticale, cereal rye (including cereals undersown with clover)** and in **Pasture - Newly sown and established clover-based pasture, clover for hay and seed production.**

WEEDS CONTROLLED	RATE/ha				CRITICAL COMMENTS
	STAGE OF WEED GROWTH				
	≤ 2 leaf and <60 mm diameter	≤ 4 leaf and <120 mm diameter	≤ 6 leaf and <150 mm diameter	≤ 8 leaf and <180 mm diameter	
Wild Radish	-	500 mL	750 mL	1.0 L	<sup>1</sup> Cotyledon to 2 leaf stage NSW only (West of Newell Hwy.), SA only (Eyre peninsula north of the line between Venus Bay and Cowell)  <sup>2</sup> Where wireweed occurs in red soils of low fertility it has been found to be less susceptible.  <sup>3</sup> Suppression only for >50 mm diameter weed stage.  <b>WILD RADISH:</b> TRIATHLON® will provide residual control of Wild Radish for up to 4 weeks after application. Effective residual activity of this product may be reduced where:  * rates lower than 1.0 L/ha are used; * dry conditions prevail;
Bifora	-	1 L + 25 mL Priority®	-	-	
Charlock, Hedge Mustard, Indian Hedge Mustard, Prickly Lettuce, Shepherd's Purse	500 mL	750 mL	1.0 L	-	
Turnip Weed, Wild Turnip	500 mL, 350 mL <sup>1</sup>	750 mL	1.0 L	-	
London Rocket, Ward's Weed	-	750 mL (≤ 5 leaf)	-	-	
Capeweed	500 mL	1.0 L	-	-	
Crassula	500 mL	750 mL	-	-	
Doublegee	-	1.0 L	-	-	
Fumitory	750 mL	(<60 mm diameter)	-	-	
Corn Gromwell, Fat hen	1.0 L	-	1.0 L (<50 mm diameter)	-	
Saffron Thistle	1.0 L	1.0 L <sup>3</sup>		-	

WEEDS CONTROLLED	RATE/ha				CRITICAL COMMENTS
	STAGE OF WEED GROWTH				
	≤ 2 leaf and <60 mm diameter	≤ 4 leaf and <120 mm diameter	≤ 6 leaf and <150 mm diameter	≤ 8 leaf and <180 mm diameter	
Amsinckia, Chamomile, Field Madder, Horned Poppy, Lesser Swinecress, Mexican Poppy, Mintweed, Slender Thistle	-	-	1.0 L (<50 mm diameter)	-	<p>* poor coverage of the soil surface is achieved; * crop is planted in non-wetting sand; * soils contain a high content of organic matter. Optimum results will be obtained if good soil moisture exists at and after application.</p> <p><b>APPLICATION</b> Activity of this product will be reduced if weeds are stressed. Optimum results will be obtained if good soil moisture exists at and after application. Where crop or weed density is high, water volume should be increased.</p>
Hexham Scent, Paterson's Curse	-	1.0 L <sup>3</sup>			
Rough Poppy, Tree Hogweed	1.0 L <sup>3</sup>	-			
Variegated thistle	-	1.0 L (<35 mm diameter)	-		
Wireweed (Hogweed) <sup>2</sup>	750 mL <i>suppression only.</i>				
Sorrel, Mountain Sorrel	-	-	1.0 L	-	
Three-horned bedstraw	-	-	1.0 L		
Cleavers	1.0 L (2-4 stem stage and 1-3 whorls of leaves per stem)				
Deadnettle, Sorrel, Toad Rush	1.0 L	-	-	-	
Canola (rape)	-	500 mL	-	-	
Purple Goosefoot	-	-	500 mL	-	
<i>Suppression of:</i> Chickweed, Fireweed, Iceplant, Mouse-eared Chickweed, Nightscented Stock, Peppergrass, Skeleton Weed, Long Storksbill, Volunteer Lupins	-	1.0 L	-	-	
<i>Suppression of:</i> Common Sowthistle (Milk Thistle), Cowvine, Dock, Horehound, Hyssop Loosestrife, Marshmallow, Scarlet Pimpernel, Stemless Thistle, Vetch (tares)	1.0 L	-	-	-	

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

#### WEED LIST

Common name	Scientific name
Amsinckia	<i>Amsinckia</i> spp
Bifora	<i>Bifora</i> spp.
Canola (rape)	<i>Brassica napus</i>
Capeweed	<i>Arctotheca calendula</i>
Chamomile	<i>Matricaria matricarioides</i>
Charlock	<i>Sinapis arvensis</i>
Chickweed	<i>Stellaria media</i>
Cleavers	<i>Galium aparine</i>
Common Sowthistle (milk thistle)	<i>Sonchus oleraceus</i>
Corn Gromwell	<i>Buglossoides arvensis</i>
Cowvine	<i>Ipomoea lonchophylla</i>
Crassula	<i>Crassula</i> spp.
Deadnettle	<i>Lamium amplexicaule</i>

Common name	Scientific name
Marshmallow	<i>Malva parviflora</i>
Mouse-eared Chickweed	<i>Cerastium glomeratum</i>
Night-scented Stock	<i>Matthiola longipetala</i>
Mexican Poppy	<i>Argemone mexicana</i>
Mintweed	<i>Salvia reflexa</i>
Mountain Sorrel	<i>Oxalis acetosella</i>
Paterson's Curse	<i>Echium plantagineum</i>
Peppergrass	<i>Lepidium</i> spp.
Prickly Lettuce	<i>Lactuca serriola</i>
Purple Goosefoot	<i>Scleroblitum atriplicinum</i>
Rough Poppy	<i>Papaver hybridum</i>
Saffron Thistle	<i>Carthamus lanatus</i>
Scarlet Pimpernel	<i>Anagallis arvensis</i>

Dense-flower Fumitory	<i>Fumaria densiflora</i>	Shepherd's Purse	<i>Capsella bursa-pastoris</i>
Dock	<i>Rumex</i> spp.	Skeleton Weed	<i>Chondrilla juncea</i>
Doublegee (Spiny Emex)	<i>Emex australis</i>	Slender Thistle	<i>Cordus tenuiflorus</i> , <i>C. pycnocephalus</i>
Fat Hen	<i>Chenopodium album</i>	Sorrel	<i>Rumex</i> spp.
Field Madder	<i>Sherardia arvensis</i>	Stemless Thistle	<i>Onopordum acaulon</i>
Fireweed	<i>Senecio</i> spp.	Three-horned Bedstraw	<i>Galium tricornutum</i>
Fumitory	<i>Fumaria</i> spp.	Toad Rush	<i>Juncus bufonius</i>
Hedge Mustard	<i>Sisymbrium officinale</i>	Tree Hogweed	<i>Polygonum patulum</i>
Hexham Scent (King Island Melilot)	<i>Melilotus indicus</i>	Turnip Weed	<i>Rapistrum rugosum</i>
Horehound	<i>Marrubium vulgare</i>	Variegated Thistle	<i>Silybum marianum</i>
Horned Poppy	<i>Glaucium flavum</i>	Vetch (Tares)	<i>Vicia sativa</i>
Hyssop Loosestrife	<i>Lythrum hyssopifolia</i>	Volunteer Lupins	<i>Lupinus</i> spp.
Iceplant	<i>Mesembryanthemum</i> spp.	Ward's Weed	<i>Carrichtera annua</i>
Indian Hedge Mustard	<i>Sisymbrium orientale</i>	Wild Radish	<i>Raphanus raphanistrum</i>
Lesser Swinecress	<i>Coronopus didymus</i>	Wild turnip	<i>Brassica tournefortii</i>
London Rocket	<i>Sisymbrium irio</i>	Wireweed (Hogweed)	<i>Polygonum aviculare</i>
Long Storksbill	<i>Erodium botrys</i>		