

CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

QA
Trifluralin 480 EC

HERBICIDE

ACTIVE CONSTITUENT: 480 g/L TRIFLURALIN

SOLVENT: 509 g/L HYDROCARBONS LIQUID

ALSO CONTAINS: 3.5 g/L POLYETHANOXY (15) TALLOW AMINE

GROUP 3 HERBICIDE

A pre-emergence herbicide for the control of annual grasses and certain broadleaf weeds in Certain Horticultural and Agricultural Crops as listed in the Directions for Use.

APVMA Approval No.: 96548/149842

EC Formulation Type
Emulsifiable
Concentrate

**BE PROUDLY
AUSTRALIAN**

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 **QUANTUM
AGROSCIENCES**

DIRECTIONS FOR USE**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. 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 1 to 2 hours before sunset and persist until 1 to 2 hours after sunrise.

DIRECTIONS FOR USE

1. FIELD CROPS		
SITUATION & CROP	WEEDS	STATE
Chickpeas	Annual Ryegrass, Paradoxa Grass (Canary Grass), Wireweed (Hogweed) Black Pigweed Suppression of Climbing Buckwheat (Black Bindweed), soil surface Wild Oats	Qld only
	Annual Ryegrass, Wireweed (hogweed), Deadnettlles, Wild Oats	Vic only
	Red & White Fumitory, Rough Poppy, Wireweed, Annual Ryegrass, Barley Grass, Canary Grass, Sand Fescue Suppression of Deadnettle, Speedwell, Three Cornered Jack, Yellow Burrweed, Brome Grass, Cereal Oats, and soil surface Wild Oats	SA only
	Amaranthus, Annual Ryegrass, Barnyard Grass, Caltrop, Crab Grass, Paradoxa Grass (Canary Grass), Pigweed, soil surface Wild Oats, Winter Grass, Wireweed Suppression of Fumitory	NSW, ACT only
Adzuki Beans, Cowpeas, Lablab, Mung Beans, Borlotti Beans, Red Kidney Beans		NSW, ACT, Qld only
Faba Beans	Annual Ryegrass, Barley Grass, Capeweed, Corn Gromwell (Sheepweed), Fumitories, Geranium, Ivy Leaf, Speedwell, Mustards, Turnips, Wireweed Suppression of Brome Grass, Soursob, and soil surface Wild Oats	SA, WA only
Pigeon Peas	Amaranthus, Barnyard Grass, Canary Grass, Crowsfoot Grass, Pigweed, Spiny Burrgrass, Summer Grass, soil surface Wild Oats, Wireweed (hogweed) Suppression of Yellow Vine (Caltrop) From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass	NSW, ACT only

RATE L/ha SOIL TYPE			CRITICAL COMMENTS
Light	Medium	Heavy	
1.25 -1.7L/ha	1.25 - 1.7 L/ha	1.25 - 1.7 L/ha	Use 1.25 L/ha when applying immediately prior to sowing. Use 1.7 L/ha when applying to dry soil before the planting rain.
800 mL/ha plus 1L/ha triallate (550 g/L)			Incorporate as per recommendations for wheat, barley, and triticale.
1.25 L/ha	1.25 L/ha	1.25 L/ha	Apply to level seedbed 0 to 4 weeks before sowing. Incorporate as per Incorporation Table 6.
1.2 - 1.5 L/ha	1.5 L/ha	1.7 L/ha	Apply from 4 weeks up to just prior to sowing. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
800 mL/ha plus 1 - 1.5 L/ha simazine flowable (500 g/L)			Apply to bare moist soil and grate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Application should not be made to ridged or excessively cloddy soil. For full reliable results, significant rainfall (20 or 30 mm) is necessary within 2-3 weeks of application.
1.2 L/ha	1.5 L/ha	1.7 L/ha	Apply between 4 weeks and just before sowing. Refer to Incorporation Table 3, 4 or 6 for suitable method of incorporation.

SITUATION & CROP	WEEDS	STATE
Lentils	Annual Phalaris, Annual Ryegrass, Wild Oats, Wireweed	NSW, ACT only
	Fumitory - Red and White, Rough Poppy, Wireweed, Barley Grass, Canary Grass, Annual Ryegrass, Sand Fescue	SA only
Navy Beans	Annual Ryegrass, Barnyard grass, Canary grass, Caltrop (Bullhead, Yellow vine), Crag grass, Mossman River grass, (Innocent Grass), Pigweed, Redroot (Amaranthus), redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed (hogweed) From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	All States
Soybeans		
Vetch	Annual Ryegrass, Deadnettle, Wireweed, soil surface Wild Oats Suppression of Brome Grass, Rough Poppy, Speedwell, Three Cornered Jack, Yellow Burr Weed, Sheepweed	SA, WA only
Cotton	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop (Bullhead/ Yellow Vine), Crab grass, Mossman Player Grass (Innocent Weed), Pigweed, Redroot (Amaranthus), Redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed (Hogweed), Black Pigweed (Qld only) From seed only: Columbus - Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	Qld NSW, ACT, WA only
Legume Seed Crop Establishment	From seed only: Columbus - Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	NSW, ACT, SA, WA, Vic, Tas only
- Annual Medics - Clover Berseem, Red, Strawberry (Sub & White)		All States
- Lucerne for hay and seed crop		
Linseed		NSW, ACT, SA, WA, Vic only

RATE L/ha SOIL TYPE			CRITICAL COMMENTS
Light	Medium	Heavy	
800 mL/ha	1.2 L/ha	1.2 L/ha	Apply 1 to 4 weeks before sowing
1.25 L/ha	1.25 L/ha	1.25 L/ha	Apply 1 to 4 weeks before sowing.
1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place.
1.2 L/ha	1.7 L/ha	2.3 L/ha	Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
1.7 L/ha	1.7 L/ha	1.7 L/ha	Apply to level seedbed 0 to 4 weeks before sowing. Refer to incorporation Table 6 for method of incorporation.
1.2 L/ha	1.7 L/ha	2.3 L/ha	Spray between 6 weeks and just before sowing takes place. Refer incorporation Table 1 & 2 for method of incorporation.
1.2 L/ha	1.2 L/ha	1.7 L/ha	Autumn Sowing - Apply from 4 weeks to 7 days before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
1.7 L/ha	1.7 L/ha	1.7 L/ha	Spring Sowing: Apply between 4 weeks and 3 days before sowing takes place. Refer Incorporation Table 6 for method of incorporation. In both cases seedling disease, cold weather, excessive moisture, high salt concentrations and drought could weaken crop seedlings and damage could occur from the use of this product. Temporary drop suppression could result.
1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray 2-4 weeks before sowing. Sowing depth should be 1.3 to 2.5 cm. Deeper sowing may result in some stand reduction. Refer incorporation Table 6 for method of incorporation

SITUATION & CROP	WEEDS	STATE
Peanuts	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop (Bullhead/ Yellow Vine), Crab grass, Mossman Player Grass (Innocent Weed), Pigweed, Redroot (Amaranthus), Redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed (Hogweed), Black Pigweed (Qld only)	WA, Qld only
Peas		All States
Canola, Safflower Sugarcane Early season Late season		Qld, NSW, only
Sunflowers		All States
Lupins		All States
	Annual Grasses and Broadleaf Weeds	NSW, ACT, Vic, Qld only
	Capeweed, Turnip, Radish, Doublegee Suppression of Annual Ryegrass and soil surface Wild Oats	WA only
	As above plus suppression of Brome Grass	WA only

RATE L/ha SOIL TYPE			CRITICAL COMMENTS
Light	Medium	Heavy	
1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
			Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
3.0 L/ha 2.3 L/ha	3.0 L/ha 2.3 L/ha	3.0 L/ha 2.3 L/ha	Apply to plant cane after emergence to "out of hand" stage. Apply to ratoon cane immediately after harvest. Refer Incorporation Table 3, 7 or 10 for suitable method of incorporation.
1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for method of incorporation.
1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
800 mL/ha plus 3 L/ha of simazine flowable (500 g/L)			Use a low volume boom applying 50-100 litres spray mixture per hectare. Apply to bare moist soil and incorporate to a depth of 5cm just prior to sowing the drop. Incorporate within 4 hours of application. DO NOT spray to a ridged soil.
1.25 L/ha plus 1 - 1.5 L/ha of simazine flowable (500 g/L)			Rate for Yellow Sands.
1.25 L/ha plus 2 L/ha of simazine flowable (500 g/L)			Rate for all other soil types. Apply to bare moist soil and incorporate to a depth of 5 cm just prior to sowing. Incorporation should be made within 4 hours of application. Application should not be made to rigid or excessively cloddy soil. For Simazine to be effective sufficient rainfall (20 to 30 mm) to wet the soil through the weed root zone is necessary within 2-3 weeks of application. Results with Simazine can be variable if seasonal conditions are dry prior to sowing and Lupins are sown into dry or low moisture seedbeds.

SITUATION & CROP	WEEDS	STATE
Lupins – <i>continued</i>	Capeweed, Doublegee, Wild Radish Wild Turnip plus suppression of Annual Ryegrass, soil surface Wild Oats and Brome Grass	WA only
	Red & White Fumitory, Rough Poppy, Wireweed, Barley Grass, Canary Grass, Annual Ryegrass, Sand Fescue Suppression of Deadnettle, Speedwell, Three Cornered Jack, Yellow Burr Weed, Brome Grass, Cereal Oats, soil surface Wild Oats	SA, WA only
	Above weeds plus Capeweed, Common Fumitory, Geranium, Indian Hedge Mustard, Sheepweed, Shepherd Purse, Toadrush, Turnips Suppression of Ice Plant & Soursob	SA only
Tobacco	Summer Grass, Crowsfoot Grass, Red Natal Grass, Love Grass, Button Grass, Rhodes Grass, Pigweed	Qld only
	Crowsfoot Grass	NSW, ACT only
Wheat, Barley & Triticale 1. Pre-Sowing Only 2. Pre-Sowing & Post-sowing (self-mulching soils)	Annual Ryegrass, Wireweed (Hogweed), <i>Phalaris</i> spp.	NSW, ACT WA, Vic only
	Fumitory	WA only
	Canary Grass	Vic only
	As above except for Fumitory	Vic only

RATE L/ha SOIL TYPE			CRITICAL COMMENTS
Light	Medium	Heavy	
1.25 L/ha plus 2 L/ha of diuron flowable (500 g/L)			DO NOT use on white or grey sands as severe crop damage may result. Use tank mix of diuron & Trifluralin where Annual Ryegrass is present. Apply at pre-sowing stage.
1.25 - 1.7 L/ha	1.25 - 1.7 L/ha	1.25 - 1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
1.25 to 1.7 L/ha plus 2 to 4 L/ha of simazine flowable (500 g/L)			Use a low volume boom applying 50-100 litres spray mixture per hectare. Apply to bare moist soil and incorporate to a depth of 5 cm just prior to sowing the crop. Incorporate within 4 hours of application. DO NOT apply to ridged soil.
800 mL/ha	1.2 L/ha	-	Apply to soil 3-4 weeks prior to transplanting. The longer period to be used for applications made during June & July. Incorporate to a depth of 10 cm.
800 mL/ha	1.2 L/ha	1.2 L/ha	Apply to light sandy soil 14 to 21 days before transplanting. DO NOT incorporate to a depth greater than 6 cm. Apply to loam (medium soil) 14 to 21 days before transplanting. DO NOT incorporate to a depth of greater than 6 cm.
800 mL/ha	800 mL/ha	800 mL/ha	Apply 1-4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine. Ground should be left flat. DO NOT use pre-sowing on self-mulching soils as damage may occur from wheel tracking and poor control of wild oats. Refer Incorporation Table 6 for method of incorporation.
			Pre-sowing: Apply more than 4 weeks before sowing to prevent crop damage. Post-sowing: Apply within 2 days after sowing to well-prepared seedbed. Refer Incorporation Table 6 for suitable method of incorporation.

SITUATION & CROP	WEEDS	STATE
Wheat	Annual Ryegrass, Paradoxa Grass (Canary Grass), soil surface Wild Oats, Wireweed (Hogweed)	Qld only
Barley		
Wheat, Triticale, Rye	Annual Ryegrass, Red & White Fumitory, <i>Phalaris</i> spp, Wireweed Suppression of Deadnettlles, Rough Poppy, Yellow Burr Weed	SA only
Barley	As above for SA plus Sand Fescue Suppression of Brome Grass	
Wheat & Triticale only	Annual Phalaris	NSW, ACT only

RATE L/ha SOIL TYPE			CRITICAL COMMENTS
Light	Medium	Heavy	
800 mL/ha	800 mL/ha	800 mL/ha	On non-self mulching soils apply 1-4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine. Ground should be left flat. On self mulching soils as above except apply more than 4 weeks before sowing to prevent crop damage. Refer incorporation Table 6 for method of incorporation.
			Apply to self-mulching and non-self mulching soils from 1-4 weeks before sowing. Sowing depth should be at least 5 cm. Use cow harrows behind combine. Ground should be left flat. Refer Incorporation Table 6 for suitable method of incorporation.
800 mL/ha	800 mL/ha	800 mL/ha	Apply 1 - 4 weeks before sowing. Sowing depth should be at least 5 cm. Use cover harrows behind combine. Ground should be left flat. DO NOT use pre-sowing on self-mulching soils as damage may occur from wheel tracking and poor control of wild oats
1.25 L/ha	1.25 L/ha	1.25 L/ha	Refer Incorporation Table 6 for method of incorporation.
800 mL/ha plus 20 g/ha QA Chlorsulfuron 750 WG Herbicide			If possible, spray and incorporate into the soil in one operation. If this is not possible incorporation should take place within 4 hours of spraying. Delay may cause inferior weed control.

2. FIELD CROPS: FOR USE IN NO-TILL/MIN-TILL CROPPING, PRE-SOWING OR INCORPORATED BY SOWING (IBS) (Using Incorporation Table)

SITUATION & CROP	WEEDS	STATE
Wheat, barley and triticale	Annual Ryegrass, Wireweed (Hogweed), <i>Phalaris</i> spp, Fumitory	WA, SA, Vic, NSW only
Chickpeas		WA only

3. VEGETABLES, ORCHARDS AND VINEYARDS

SITUATION & CROP	WEEDS	STATE
Transplants only Broccoli, Cabbage, Cauliflowers, Tomatoes	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop, (Bullhead Yellow Vine), Crab Grass, Mossman River Grass (Innocent Grass) Pigweed, Redroot (Amaranthus) Redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed (Hogweed) From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	All States
Direct Seeded Only Broccoli, Brussels Sprouts, Cabbage		Vic only
Cauliflower		All States
Carrots		Vic only
Chicory		

RATE		CRITICAL COMMENTS
1.5 – 2.0 L/ha		Use higher rate on lighter sandy and sandy loam soils. DO NOT use on heavy soils. Use with Knife/Blade point sowing equipment. Use higher rate for heavier stubble coverage. Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels. Refer Incorporation Table, point 13. Application can occur 0-24 hours prior to incorporation by sowing. For best results apply as close as possible to sowing (within 12 hours. Application 12-24 hours before sowing may be more adversely affected by above average soil moisture, warm winter temperatures and high seed densities. These factors individually or combined may reduce final weed control levels.
1.25 – 1.7 L/ha plus 1.1 kg/ha simazine (900 g/kg)		Incorporate as per Incorporation Table, point 13.
RATE L/ha SOIL TYPE		
Light	Medium	Heavy
1.2 L/ha	1.7 L/ha	2.3 L/ha

SITUATION & CROP	WEEDS	STATE
Green Beans	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop, (Bullhead Yellow Vine), Crab Grass, Mossman River Grass (Innocent Grass) Pigweed, Redroot (Amaranthus) Redshank (Prince of Wales Feather), Summer Grass, soil surface Wild Oats, Winter Grass, Wireweed (Hogweed)	All States
Orchards and Vineyards	From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	Qld, SA, WA, Vic, Tas only

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

WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED

GENERAL INSTRUCTIONS

THIS PRODUCT MUST BE INCORPORATED INTO THE SOIL WITHIN 4 HOURS OF APPLICATION EXCEPT WHERE THE CROP IS SOWN WITH MINIMUM TILLAGE SOWING EQUIPMENT (FITTED WITH KNIFE POINTS OR BLADES LESS THAN 12 mm WIDE, USUALLY WITH PRESS WHEELS) WHERE APPLICATION MAY OCCUR UP TO 24 HOURS BEFORE INCORPORATION BY THE SOWING PROCESS.

INCORPORATION TABLE

- Prior to furrowing out: 2 workings at an angle required using Offset or Tandem disc harrows.
- After furrowing out: 2 workings required using Go-Devil discs or Lillion cultivators set at 10 cm depth.
- Rotary Hoe: 1 working required at 5-7.5 cm depth. Sugarcane: 7.5-13 cm depth.
- Offset or Tandem Disc Harrows: (preferably with spiked harrows in tandem) 2 workings at an angle required at 7.5-15 cm depth at 6.5-10 km per hour.
- Heavy Diamond or Stump Jump Harrows - (weighted 20-30 kg per section) at 10-13 km/hr speed. Then cross work with offset or tandem disc harrows set to 7.5-15 cm depth at speed 6.5-10 km per hour.
- Weighted Heavy Diamond or Stump Jump Harrows (weighted with 20-30 kg per section) at 10-13 km per hour. Cross work with combine at 5-7.5 cm depth at speed of 10-13 km/hr.
- Disc Ratoon Cultivator: 2 workings needed with discs and cultivator set at 7.5-13 cm depth.
- Offset or Tandem Disc Harrows: set at 7.5-15 cm depth. A second discing is required working in opposite direction with discs set to throw treated soil into tree or vine row.
- Rotary Hoe: 1 working needed at 5-10 cm depth.

RATE L/ha SOIL TYPE			CRITICAL COMMENTS
Light	Medium	Heavy	
1.2 L/ha	1.5 L/ha	1.7 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table, points 3, 4 or 5 for suitable method of incorporation.
1.2 L/ha	1.7 L/ha	2.3 L/ha	Apply to new planting during pre plant cultivation. Apply to established crops in spring after weeds and green manure crop has been ploughed into ground. Refer Incorporation Table 8 or 9 for suitable method of incorporation

- Offset Discs (Bumpers): 2 workings needed at depth of 7.5-13 cm.
- Incorporated by sowing (IBS) on suitably prepared seedbed with heavy diamond harrows trailing or as separate operation.
- Post-sowing/Pre-emergence: Use heavy diamond harrows cross working at right angles to the direction of sowing. DO NOT attempt this method of incorporation on poorly prepared, clumpy, or cloddy soils.
- Incorporation by Sowing (IBS) with knife or blade points. Use press wheels to avoid dragging treated soil back into the seed furrow. Maintain slow to moderate speed to ensure that soil throw is not into adjacent.

Note:

- Knife or blade point systems can result in poor weed control in the seed furrow as chemical displacement from this zone occurs. Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels.
- A knife or blade point is 12 mm or less, has no wings, inverted T, or blade, and is generally placed on minimum 20 cm tyne spacing.

MIXING

This product is an emulsifiable concentrate, which mixes readily with water. Add the recommended amount to the spray tank during filling operation and apply 70 – 450 L of water/ha (broadcast basis) dependent on soil type.

ENSURE ADEQUATE AGITATION IS CONTINUED THROUGHOUT THE OPERATION. LEAVING THE MADE-UP SPRAY MIXTURE FOR LONG PERIODS OF TIME WITHOUT AGITATION IS NOT RECOMMENDED.

Under hot conditions or where possible spray and incorporate into the soil in one operation. Delay may cause inferior weed control. Use properly calibrated standard low-pressure (170-340 kilopascal) boom type sprayer with fan tips.

CONDITIONS FOR BEST RESULTS

This product must be thoroughly incorporated as recommended. Soil should be well worked and free of weeds at time of application. Product effectiveness may be reduced by inadequate incorporation, high organic matter, excess clods, crop or trash residues, stones, or other foreign matter and in areas of unnaturally high weed seed population such as header tracks or livestock rest areas. Trifluralin is volatile and disappears from exposed surfaces. Loss is hastened by high temperatures, winds, or warm moist soil.

INTEGRATED WEED MANAGEMENT

The use of Integrated Weed Management techniques in conjunction with QA Trifluralin 480 Herbicide is always recommended. Agronomic practises that reduce the weed seed bank in the soil prior to the use of QA Trifluralin 480 Herbicide. Failure to use Agronomic and Integrated Weed Management practises that reduce the weed seed bank in the soil will result in higher weed soil populations. Paddocks with excessively high weed seed banks may have sufficient weed numbers surviving such that final weed control may be considered below a commercially acceptable level and additional herbicide treatments may be necessary. The use of Integrated Weed Management techniques will also reduce the potential for the development or survival of Group 3 herbicide resistance weed biotypes.

WILD OATS

Germinating wild oat seeds lying on soil surface will be controlled. Therefore, specific wild oat control is only possible with shallow cultivation. Poor control will occur on self-mulching soils and all soil types where deep cultivation is practiced.

COMPATIBILITY

This product may be mixed in the spray tank with: Herbicides: tri-allate, chlorsulfuron, triasulfuron, diuron, simazine, paraquat, paraquat/diquat, Broadstrike, Spinnaker, metribuzin. Insecticide: chlorpyrifos.

Note:

1. Information on compatibility is understood to be correct at the time of publication, however products may vary from time to time, therefore a small-scale compatibility test should be carried out before mixing in the spray tank.
2. Observe any mixing sequence instructions for tank mix products.

EQUIPMENT MAINTENANCE AND USAGE

Keep the spray unit for herbicides only if possible. Otherwise, spray tanks, pumps, lines, and nozzles should be thoroughly rinsed several times with clean water following application. Spray Sure Spray Tank Cleaner is suitable for this purpose and will also remove trifluralin stains.

RESISTANT WEEDS WARNING

QA Trifluralin 480 Herbicide is a member of the dinitroaniline group of herbicides. QA Trifluralin 480 Herbicide has the inhibitors of tubulin formation mode of action. For weed resistance management QA Trifluralin 480 is a Group 3 herbicide. Some naturally occurring weed biotypes resistant to QA Trifluralin 480 and other Group 3 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 QA Trifluralin 480 or other Group 3 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use Quantum Agrosiences Holdings Pty Ltd accepted no liability for any losses that may result from the failure of QA Trifluralin 480 to control resistant weeds.

GROUP	3	HERBICIDE
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PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT exceed rates specified, to avoid crop damage. DO NOT plant sensitive grasses such as oats, sorghum, millets, *phalaris* spp., ryegrass or wheat for 12 months following the use of this product except where wheat follows wheat or other winter crops. DO NOT plant oilseed poppies when a detectable residue of trifluralin is present in the soil. Levels as low as 0.02 ppm may interact with other unfavourable factors (moisture, stress disease etc) to reduce poppy growth and vigour. DO NOT apply to orchards and vineyards after first flush of growth or when residues can lodge on or in fruit.

Reduced germination of wheat and barley may occur due to combination of following circumstances and use of this product:

- Short Coleoptile cultivars
- Use of seed dressings (except Vitavax)
- Shallow or uneven seedling depth.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers, or watercourses with the chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry well-ventilated area, out of direct sunlight. DO NOT store below 5°C. Extended storage below 5°C can result in the formation of crystals on the bottom of the container. If crystallisation does occur, store the container on its side at room temperature and rock occasionally until crystals re-dissolve. Ensure any crystals are dissolved before adding to the spray tank.

Single Containers only: 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 container to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation, and tree roots. Empty containers and product should not be burnt.

For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

110L Mini Bulk Returnable Container: Store the original sealed 110L container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the MicroMatic valve or the security seal. DO NOT contaminate the container with water or any other foreign matter. After each use of the product ensure the MicroMatic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the 110L container have been used, please return the empty container to the point of purchase. The 110L container remains the property of Quantum Agrosciences Holdings Pty Ltd.

SAFETY DIRECTIONS

Harmful if swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. DO NOT inhale spray mist. When opening the container and using the prepared spray wear cotton overalls, buttoned to the neck and wrist and a washable hat and elbow length chemical resistant gloves and face shield or goggles. After use and before eating, drinking, or smoking, wash hands, arms, and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centr., Phone Australia 13 11 26. If swallowed DO NOT induce vomiting. If skin contact occurs, remove contaminated clothing wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet (SDS) which is available from the supplier.

CONDITIONS OF SALE: Quantum Agrosciences Holdings Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Quantum Agrosciences Holdings Pty Ltd's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Quantum Agrosciences Holdings Pty Ltd has any authority to add to or alter these conditions.

Additional information required under the Globally Harmonised System (GHS) classification of the substance/mixture: **Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.** Wash all exposed external body areas thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.



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