

# CAUTION

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

*KENSO AGCARE*

# TRIFLURALIN 480

**SELECTIVE HERBICIDE**

ACTIVE CONSTITUENT: 480 g/L TRIFLURALIN

SOLVENT: 475 g/L LIQUID HYDROCARBON

**GROUP D HERBICIDE**

A pre-emergence herbicide for the control of annual grasses and certain broad leaf weeds in certain horticultural and agricultural crops as listed in the Directions for Use table.



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**IMPORTANT: READ THE ATTACHED LEAFLET/BOOKLET BEFORE USE**

**CONTENTS: 20 Litres APVMA Approval No.: 56696/ 54132**

# KENSO AGCARE TRIFLURALIN 480

## SELECTIVE HERBICIDE

### GENERAL INSTRUCTIONS

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

### STORAGE AND DISPOSAL

Store in the closed, original container in a dry, well ventilated area away from children, animals, food, feedstuffs, seed and fertilizers. DO NOT store for prolonged periods in direct sunlight.

Do not store below 5°C.

Extended storage below 5°C can result in the formulation of crystals on the bottom of the container. If crystallization does occur, store the container on its side at room temperature and rock occasionally until the crystals re-dissolve. Ensure any crystals are dissolved before adding to the spray tank.

Triple or preferably pressure 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 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.

### 110L Mini Bulk Returnable Container (110L only)

DO NOT tamper with the non-return valve or the security seal. DO NOT contaminate the drum with water or any foreign matter.

After each use of the product, please ensure that the non-return valve, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the drum have been used, please return the empty drum to the point of purchase. The drum remains the property of Kenso Corporation (M) Sdn Bhd.

### 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 PVC 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 Centre (Phone 13 11 26). If swallowed DO NOT induce vomiting. Give a glass of water.

### MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet (MSDS).

### CONDITIONS OF SALE

"Kenso Corporation (M) Sdn Bhd" ("Kenso") 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 Kenso's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Kenso has any authority to add to or alter these conditions.

In a Transport Emergency  
Dial **000**  
Police or Fire Brigade







Situation & Crop	Weeds	State	Rate / soil type			Critical Comments
			Light	Medium	Heavy	
Tobacco	Summer Grass, Crowsfoot Grass, Red Natal Grass, Love Grass, Button Grass, Rhodes Grass, Pigweed	Qld only	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 10cm.
	Crowsfoot Grass	NSW, ACT only	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 6cm. Apply to loam (medium soil) 14 to 21 days before transplanting. DO NOT incorporate to a depth of greater than 6cm.
Wheat, Barley & Triticale	Annual Ryegrass, Wireweed (Hogweed), Phalaris spp.	NSW, ACT, WA, Vic only	800 mL/ha	800 mL/ha	800 mL/ha	Apply 1-4 weeks before sowing. Sowing depth should be at least 5cm. 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.
	Fumitory	WA only				
	Canary Grass	Vic only				
1. Pre-Sowing Only						
2. Pre-Sowing & Post Sowing (self-mulching soils)	As above, except for Fumitory	Vic only				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.
Wheat	Annual Ryegrass , Paradoxa Grass (Canary Grass), soil surface Wild Oats, Wireweed (Hogweed)	Qld only	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 5cm. 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.
Barley						Apply to self-mulching and non self-mulching soils from 1-4 weeks before sowing. Sowing depth should be at least 5cm. Use cover harrows behind combine. Ground should be left flat. Refer Incorporation Table 6 for suitable method of incorporation.
Wheat, Triticale, Rye	Annual Ryegrass, Red & White Fumitory, Phalaris spp., Wireweed, suppression of Deadnettle, Rough Poppy, Yellow Burr Weed	SA only				Apply 1-4 weeks before sowing. Sowing depth should be at least 5cm. 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.
Barley	As above for SA plus Sand Fescue and suppression of Brome Grass		1.25 L/ha	1.25 L/ha	1.25 L/ha	
Wheat & Triticale only	Annual Phalaris	NSW, ACT only	800 mL/ha plus 20 g/ha Kenso Agcare Ken-Chlor 750 WG or Lusta™			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 SYSTEMS, PRE-SOWING OR INCORPORATED BY SOWING (IBS). (Using Incorporation Table 13)

Situation & Crop	Weeds	State	Rate	Critical Comments
Wheat, barley and triticale	Annual Ryegrass, Wireseed, Phalaris spp, Fumitory	WA, SA, Vic, NSW only	1.5 L- 2L/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 table 13 for method of incorporation. <b>WA</b> only: Application can occur 0-24 hrs 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 temperature and high weed seed densities. These factors individually or combined may reduce final weed control levels.
Chickpeas		WA only	1.25-1.7L/ha plus 1.1kg/ha 900 g/Kg Simazine DF	Incorporate as per Incorporation Table 13

3. VEGETABLES, ORCHARDS AND VINEYARDS

Situation & Crop	Weeds	State	Rate / soil type			Critical Comments
			Light	Medium	Heavy	
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)	All States	1.2 L/ha	1.7 L/ha	2.3 L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
Direct Seeded Only Broccoli		Vic, Tas, SA, NSW, ACT, WA only				
Brussels Sprouts, Cabbage, Cauliflower		All States				
Carrots		Vic only				
Chicory		All States				
Green Beans		Vic only				
Orchards and Vineyards	From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	All States	1.2 L/ha	1.5 L/ha	1.7 L/ha	
		Qld, SA, WA, Vic, Tas only	1.2 L/ha	1.7 L/ha	2.3 L/ha	

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  
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EXCEPT IN WESTERN AUSTRALIA WHERE THE CROP IS SOWN WITH MINIMUM TILLAGE SOWING EQUIPMENT (FITTED WITH KNIFE POINTS OR BLADES LESS THAN 12MM 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 Lilliston cultivators set at 10 cm depth.
  - Rotary Hoe: - 1 working required at 5-7.5cm depth. Sugar Cane: - 7.5-13cm depth.
  - Offset or Tandem Disc Harrows:- (preferably with spiked harrows in tandem) 2 workings at an angle required at 7.5-15cm depth at 6.5-10km per hour.
  - Heavy Diamond or Stump Jump Harrows: (weighted 20-30kg per section) at 10-13 km/hr speed. Then cross work with offset or tandem disc harrows set to 7.5-15cm depth at speed 6.5-10km per hour.
  - Weighted Heavy Diamond or Stump Jump Harrows: (weigh with 20-30kg per section) at 10-13km/hr. Cross work with combine at 5-7.5cm depth at speed of 10-13km/hr.
  - Disc Ratoon Cultivator: - 2 workings needed with discs and cultivator set at 7.5-13cm depth.
  - Offset or Tandem Disc Harrows:- set at 7.5-15cm 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 5-10cm depth.
  - Offset Discs (Bumpers): - 2 workings needed at depth of 7.5-13cm.
  - Incorporation by sowing (IBS) on suitably prepared seedbed with heavy diamond harrows trailing or as a 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 furrows.  
**Note a.** Knife or blade point systems can result in poor weed control in the seed furrows as chemical displacement from this zone occurs. Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels.  
**b.** A Knife or blade point is 12mm or less, has no wings, inverted T or blade, and is generally placed on a minimum 8 inch 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 70-450L 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 Kenso Agcare Trifluralin 480 are always recommended. Agronomic practices that reduce the weed seed bank in the soil prior to the use of Kenso Agcare Trifluralin 480 will result in higher weed control levels from Kenso Agcare Trifluralin 480. Failure to use Agronomic and Integrated Weed Management practices that reduce the weed seed bank in the soil will result in higher weed seed 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 D 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 practised.

COMPATIBILITY  
This product may be mixed in the spray tank with:  
Herbicides: Avadex Xtra\*, Kenso Agcare Ken-Chlor 750, Kenso Agcare Ken-Gran 750, 900 g/Kg Diuron DF, 900 g/Kg Simazine DF, Kenso Agcare Para-Ken 250, Kenso Agcare Speedy 250, Broadstrike, Spinnaker, Bladex, Kenso Agcare Metribuzin 750, Credit /Bonus  
Insecticides: Kenso Agcare Kensban 500, Endosulfan 350EC.

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. Spraymate Tank & Equipment Cleaner is suitable for this purpose and will also remove Trifluralin stains.

RESISTANT WEEDS WARNING

GROUP	D	HERBICIDE
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Kenso Agcare Trifluralin 480 Selective Herbicide is a member of the Dinitronilines group of herbicides. Kenso Agcare Trifluralin 480 has the inhibitors of tubulin formation mode of action. For weed resistance management Kenso Agcare Trifluralin 480 is a Group D herbicide. Some naturally-occurring weed biotypes resistant to Kenso Agcare Trifluralin 480 and other Group D 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 Kenso Agcare Trifluralin 480 or other Group D herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Kenso Corporation (M) Sdn Bhd accepts no liability for any losses that may result from the failure of Kenso Agcare Trifluralin 480 to control resistant weeds.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS  
DO NOT use in high winds.  
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 0.02ppm 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 the use of this product:

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

Drift Warning: DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT  
DO NOT contaminate streams, rivers or waterways with the chemical or used containers.