

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

# Smart Trifluralin 480 EC

## HERBICIDE

**ACTIVE CONSTITUENT: 480 g/L TRIFLURALIN**  
**SOLVENT: 480 g/L LIQUID HYDROCARBON**

**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 table.

**IMPORTANT:**  
**READ THE ATTACHED BOOKLET BEFORE**  
**USING THIS PRODUCT**

Batch Number:

Date of Manufacture:

Scan QR Code to  
access SDS  
on mobile device



APVMA Approval Number: 61325/139506

**Crop Smart**  
better crop protection

Crop Smart Pty. Ltd  
ACN 093 927 961  
2409/4 Daydream Street, Warriewood NSW 2102  
Tel: 1300 783 481 Fax: 1300 783 491



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**CONTENTS: 20 – 1000 LITRES**

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## **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](http://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 15 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.

## 1. FIELD CROPS

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Chickpeas	Annual Ryegrass, Paradoxa Grass (Canary Grass), Wireweed (Hogweed), Black Pigweed. Suppression of Climbing Buckwheat (Black Bindweed), soil surface Wild Oats	Qld only	1.25 -1.7L/ha	1.25 -1.7L/ha	1.25 -1.7L/ha	Use 1.25L/ha when applying immediately prior to sowing. Use 1.7L/ha when applying to dry soil before the planting rain.
	Annual Ryegrass, Wireweed (Hogweed), Deadnetties, Wild Oats	Vic only	800mL/ha plus 1.6L/ha Smart Tri-Allate 500 EC Herbicide			Incorporate as per recommendations for wheat, barley and triticale.
	Red & White Fumitory, Rough Poppy, Wireweed, Annual Ryegrass, Barley Grass, Canary Grass, Sand Fescue, Suppression of Deadnettle, Speedwell, Three Cornered Jack, Yellow Burr weed, Brome Grass, Cereal Oats and soil surface Wild Oats	SA only	1.25L/ha	1.25L/ha	1.25L/ha	Apply to level seedbed 0 to 4 weeks before sowing. Incorporate as per Incorporation Table 6.
	Amaranthus, Annual Ryegrass, Barnyard Grass, Caltrop, Crab Grass, Paradoxa Grass (Canary Grass), Pigweed, Wild Oats, Winter Grass, Wireweed, Suppression of Fumitory	NSW, ACT only	1.2 - 1.5L/ha	1.5L/ha	1.7L/ha	Apply from 4 weeks up to just prior to sowing. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
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 Wild Oats	SA, WA only	800mL/ha plus 1 - 1.5L/ha Simazine (500g/L)			Apply to bare moist soil and incorporate to a depth of 5cm 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 30mm) is necessary within 2-3 weeks of application.

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Pigeon Peas	Amaranthus, Barnyard Grass, Canary Grass, Crowsfoot Grass, Pigweed, Spiny Burrgrass, Summer Grass, Wild Oats, Wireweed (Hogweed), Suppression of Yellow Vine (Caltrop), From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass	NSW, ACT only	1.2L/ha	1.5L/ha	1.7L/ha	Apply between 4 weeks and just before sowing. Refer to Incorporation Table 3, 4 or 6 for suitable method of incorporation.
Lentils	Annual Phalaris, Annual Ryegrass, Wild Oats, Wireweed	NSW, ACT only	800mL/ha	1.2L/ha	1.2L/ha	Apply 1 to 4 weeks before sowing.
	Fumitory - Red and White, Rough Poppy, Wireweed, Barley Grass, Canary Grass, Annual Ryegrass, Sand Fescue	SA only	1.25L/ha	1.25L/ha	1.25L/ha	Apply 1 to 4 weeks before sowing.
Vetch	Annual Ryegrass, Deadnettle, Wireweed, soil surface Wild Oats, suppression of Brome Grass, Rough Poppy, Speedwell, Three Cornered Jack, Yellow Burr Weed, Sheepweed	SA, only	1.7L/ha	1.7L/ha	1.7L/ha	Apply to level seedbed 0 to 4 weeks before sowing. Refer to incorporation Table 6 for method of incorporation.

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Cotton	Annual Ryegrass, Barnyard Grass, Canary Grass, Caltrop (Bullhead/ Yellow Vine), Crab Grass, Mossman River 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 Grass, Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	Qld, ACT, NSW, WA only	1.2L/ha	1.7L/ha	2.3L/ha	Spray between 6 weeks and just before sowing takes place. Refer Incorporation Table 1 & 2 for method of incorporation.
Legume Seed Crop Establishment - Annual Medics - Clover (Berseem, Red, Strawberry, Sub and White) Lucerne		NSW, ACT, SA, WA, Vic, Tas only	1.2L/ha	1.7L/ha	1.7L/ha	Autumn Sowing – Apply from 4 weeks to 7 days before sowing takes place. Refer Incorporation Table 6 for method of incorporation. 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 crop suppression could result.
Linseed		NSW, ACT, SA, WA, Vic only	1.2L/ha	1.5L/ha	1.7L/ha	Spray 2-4 weeks before sowing. Sowing depth should be 1.3 to 2.5cm. Deeper sowing may result in some stand reduction. Refer Incorporation Table 6 for method of incorporation.
Peanuts		WA, Qld only				Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 or 11 for suitable method of incorporation.
Peas Canola, Safflower		All States				Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 or 11 for method of incorporation.
Sugar cane - Early Season - Late Season		Qld, NSW, ACT only	3.0L/ha 2.3L/ha	3.0L/ha 2.3L/ha	3.0L/ha 2.3L/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.
Sunflowers		All States	1.2L/ha	1.5L/ha	1.7L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for method of incorporation.
Lupins						Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Lupins	Annual Grasses and Broadleaf Weeds	NSW, ACT, Vic, Qld only	800mL/ha plus 3L/ha of Simazine (500g/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 crop. Incorporate within 4 hours of application. Do not apply to a ridged soil.
	Capeweed, Turnip, Radish, Doublegee and Suppression of Annual Ryegrass Wild Oats	WA only	1.25L/ha plus 1 – 1.5L/ha of Simazine (500g/L)			Rate for Yellow Sands.
	As above plus suppression of Brome Grass		1.25L/ha plus 2L/ha of Simazine (500g/L)			Rate for all other soil types. Apply to bare moist soil and incorporate to a depth of 5cm 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 Simazine to be effective sufficient rainfall (20-30mm) 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 seed beds.
	Capeweed, Doublegee, Wild Radish, Wild Turnip plus suppression of Annual Ryegrass, Wild Oats and Brome Grass		1.25L/ha plus 2L/ha of Diuron (500g/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 pre-sowing stage when using incorporation method in Incorporation Table point 13. For Post-sowing Preemergent application, ensure seed is adequately covered with soil. Refer to Incorporation Table point 12.
	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	WA only	1.25 – 1.7L/ha	1.25 – 1.7L/ha	1.25 – 1.7L/ha	Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 6 for method of incorporation.
	Above weeds plus Capeweed, Common Fumitory, Geranium, Indian Hedge Mustard, Sheepweed, Shepherd's Purse, Toadrush, Turnips, suppression of Ice Plant, Soursob	WA only	1.25L/ha to 1.7L/ha plus 2 to 4L/ha of Simazine (500g/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 crop. Incorporate within 4 hours of application. Do not apply to a ridged soil.

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	800mL/ha	1.2L/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	800mL/ha	1.2L/ha	1.2L/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, Vic, WA only	800mL/ha	800mL/ha	800mL/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.  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.
Pre-Sowing Only	Fumitory	WA only				
	Canary Grass	Vic only				
Pre-Sowing & Post Sowing (self-mulching soils)	As above, except for Fumitory	Vic only				
Wheat	Annual Ryegrass, Paradoxa Grass (Canary Grass), soil surface Wild Oats, Wireweed (Hogweed)	Qld only	800mL/ha	800mL/ha	800mL/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						
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		1.25L/ha	1.25L/ha	1.25L/ha	



Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Wheat & Triticale only	Annual Phalaris	NSW, ACT only	800mL/ha plus 20g/ha of 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.
Quinoa (Chenopodium quinoa)	Annual ryegrass, Fumitory spp., Paradoxa grass (Canary grass), Phalaris spp., Wild oats, Wireweed (Hogweed) Suppression of Dead nettle, Rough poppy, Yellow bur weed	All States	1.5 - 2L/ha			Spray between 4 weeks and just prior to sowing using a boom spray or equivalent in 50 - 100 L water/ha. Smart Trifluralin must be thoroughly incorporated into the soil within 4 hours of application using Knife Point, No-till seeding systems or equivalent. DO NOT apply more than one application per crop. The sensitivity of some species and varieties of quinoa has not been fully evaluated. It is advisable to treat a small number of plants to ascertain their reaction before treating the whole crop.

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

(Using Incorporation Table Point 13)

Situation & Crop	Weeds	State	Rate	Critical Comments
<b>Wheat, barley, triticale and canola<sup>1</sup></b>	Annual ryegrass, Wireweed, Phalaris spp, Fumitory, Sand fescue ( <i>Vulpia fasciculata</i> ), Winter grass ( <i>Poa annua</i> ), Paradoxa grass (Canary grass) ( <i>Phalaris paradoxa</i> ), Corn gromwell (Sheepweed) ( <i>Buglossoides arvensis</i> ), Rough poppy ( <i>Papaver hybridum</i> ) Suppression: Soil Surface Wild oats, Brome grass ( <i>Bromus diandrus</i> ), Silver grass ( <i>Vulpia bromoides</i> ), Barley grass ( <i>Hordeum leporinum</i> ), Cereal oats ( <i>Avena sativa</i> ), Three-Cornered Jack (Double gee) ( <i>Emex australis</i> ), Caltrop (Bullhead & Yellow vine) ( <i>Tribulus terrestris</i> ), Yellow burr weed ( <i>Amsinckia</i> spp), Dead nettle ( <i>Lamium amplexicaule</i> ), Speedwell ( <i>Veronica</i> spp)	WA, SA, Vic, NSW, Qld, Tas <sup>2</sup>	<b>1.5 – 3L/ha</b>	<p>Use only with knife/blade points and press-wheels - refer to the Incorporation Table point 13 for method of incorporation. Use high rates on light sandy and sandy loam soils. DO NOT use on heavy soils. Use high rates for heavier stubble coverage and high weed density situations. Stubble coverage above 40 - 50% ground cover can reduce weed control below acceptable levels. Suppression of Brome grass and Barley grass may be reduced in medium to high weed density situations. Higher rates are likely to provide improved suppression of Brome grass, Wild oats, Cereal oats, Barley grass and Silver grass. Control of deep germinating/late germinating weeds may be reduced. To maintain crop safety attention to sowing speed and soil throw is required - avoid throwing treated soil into adjacent sowing furrows. This is especially critical at higher use rates. Avoid sites that water log or where furrow walls may collapse as crop establishment &amp; vigour may be reduced.</p> <p>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 weed seed densities. These factors individually or combined may reduce final weed control. Avoid sowing sensitive crops into areas treated with 2 - 3 L/ha if dry or drought conditions have persisted since application.</p> <p><sup>1</sup>Canola variety 44C73 has shown some heightened sensitivity and therefore higher rates should be used with caution when sowing this variety.</p> <p><sup>2</sup>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.</p>

Situation & Crop	Weeds	State	Rate	Critical Comments
Wheat, barley, triticale and canola	Annual ryegrass, Wireweed, Phalaris spp, Fumitory, Wild oats, Cereal oats, Sand fescue ( <i>Vulpia fasciculata</i> ), Silver grass ( <i>Vulpia bromoides</i> ) Winter grass ( <i>Poa annua</i> ), Paradoxa grass (Canary grass) ( <i>Phalaris paradoxa</i> ), Corn gromwell (Sheepweed) ( <i>Buglossoides arvensis</i> ), Rough poppy ( <i>Papaver hybridum</i> ) Suppression Soil Surface - Brome grass ( <i>Bromus diandrus</i> ), Barley grass ( <i>Hordeum leporinum</i> ), Three-Cornered Jack (Double gee) ( <i>Emex australis</i> ), Caltrop (Yellowvine & Bullhead) ( <i>Tribulus terrestris</i> ), Yellow burr weed <i>Amsinckia</i> spp), Dead nettle ( <i>Lamium amplexicaule</i> ), Speedwell ( <i>Veronica</i> spp)	WA, SA, Vic, NSW, Qld, Tas <sup>2</sup>	1.5 - 2 L/ha plus 1.6 L/ha Smart Tri-Allate 500	Use only with knife/blade points and presswheels - refer to the Incorporation Table point 13 for method of incorporation. Use higher rates on light sandy and sandy loam soils. DO NOT use on heavy soils. Avoid soils, which are non-wetting or are likely to become clumpy or cloddy as they may suffer reduced weed control. Use higher rates for heavier stubble coverage and high weed density situations. Stubble coverage above 40 - 50% ground cover can reduce weed control below acceptable levels. Suppression of Brome grass and Barley grass may be reduced in medium to high weed density situations. Higher rates are likely to provide improved control levels of Brome grass, Wild oats, Cereal oats, Barley grass and Silver grass. Control of deep/late germinating weeds may be reduced. Insufficient incorporation of Smart Tri-Allate 500 will reduce Wild oat control. Control may be poor in the first years of practising no-till/min till. To maintain crop safety attention to sowing speed and soil throw is required. Avoid throwing treated soil into adjacent sowing furrows. This is especially critical at higher use rates and in cereals. Avoid sites that water log or where furrow walls may collapse as crop establishment & vigour may be reduced. Incorporate within 6 hours to ensure the effectiveness of Smart Tri-allate 500 is retained.
Chickpeas	Annual ryegrass, Wireweed, Phalaris spp, Fumitory	WA only	1.25 - 1.7 L/ha plus 1.1 kg/ha of a 900 g/kg simazine product	Incorporate as per Incorporation Table point 13

### 3. VEGETABLES, ORCHARDS, VINEYARDS, OIL TEA TREE, INDUSTRIAL HEMP, HERBS AND SPICES

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, Wild Oats, Winter Grass, Wireweed (Hogweed) From seed only: Columbus Grass, Guinea Grass, Johnson Grass, Liverseed Grass (Urochloa)	All States	1.2L/ha	1.7L/ha	2.3L/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		All States					
Cauliflower		Vic only					
Carrots		All States					
Chicory		Vic only					
Green Beans, Navy beans		All States	1.2L/ha	1.5L/ha	1.7L/ha		
Soybeans			1.2L/ha	1.7L/ha	2.3L/ha		Spray between 4 weeks and just before sowing takes place. Refer Incorporation Table 3, 4 or 5 for suitable method of incorporation.
Orchards and Vineyards		Qld, SA, WA, Vic, Tas only	1.2L/ha	1.7L/ha	2.3L/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.
Duboisia		All States					Apply to new planting during pre-plant cultivation. Apply to established crops in spring after weeds and green manure crop has been ploughed into the ground. Smart Trifluralin 480 must be incorporated into the soil within 4 hours of application. Refer to Incorporation Table points 8 or 9 for method of incorporation.
Swedes and Turnips					Apply between 4 weeks and just prior to sowing. Apply by boom spray in a spray volume of 70 - 450 L/ha depending on soil type. Refer to Incorporation Table point 3, 4 or 5 for method of incorporation. DO NOT apply more than one application per crop.		
Parsnips	Winter grass (Poa annua)		1.4 L/ha		Broadcast spray to the soil surface between 4 weeks prior to, and just before sowing, using calibrated boom sprayer or similar equipment. Smart Trifluralin 480 must be incorporated into the soil within 4 hours of application using either a rotary hoe or disc technique. Apply a maximum one application per crop using spray volume between 70 - 450 L/ha.		

Situation & Crop	Weeds	State	Rate / Soil Type			Critical Comments
			Light	Medium	Heavy	
Oil Tea Tree	Annual thistles, Barnyard grass, Creeping oxalis, Fat hen, Geranium, Needle burr, Potato weed, Red shank, Sowthistle, Wireweed	All States	1.2 L/ha plus simazine at 3 - 4 L/ha (500 g/L simazine products) or 1.5 - 2.2 kg/ha (900 g/kg simazine product)	1.7 L/ha plus simazine at 3 - 4 L/ha (500 g/L simazine products) or 1.5 - 2.2 kg/ha (900 g/kg simazine product)	2.3 L/ha plus simazine at 3 - 4 L/ha (500 g/L simazine products) or 1.5 - 2.2 kg/ha (900 g/kg simazine product)	Apply to bare, moist soil. Apply up to 4 weeks before planting and incorporate within 4 hours of application. Use the lower rate of simazine for light textured soils.
Industrial hemp	Annual ryegrass, Barnyard grass, Caltrop (bullhead, yellowvine), Crab grass, Corn gromwell, Fescue, Fumitory spp., Mossman river grass (Innocent grass), Paradoxa grass (Canary grass), Phalaris spp., Pigweed, Redroot (Amaranthus), Redshank (Prince of Wales feather), Rough poppy, Summer grass, soil surface wild oats, Winter grass, Wireweed (Hogweed) From seed only: Columbus grass, Guinea grass, Johnson grass, Liverseed grass (Urochloa)	All States	1.2 L/ha	1.7 L/ha	2.3 L/ha	Pre-sowing: apply one application before weeds emerge to control annual grasses and broadleaf weeds and incorporate into the top 5 cm of soil prior to sowing, OR Post-planting: apply one application before emergence, with rainfall or irrigation to closely follow to achieve effective incorporation into soil. Use suitable ground application equipment. Ensure equipment is properly calibrated. Use lower rates when short residual control is required. Increase the application rate when longer residual control is required. The sensitivity of some species and varieties has not been fully evaluated. Test a small number of plants before applying to the whole crop.

<p>Culinary herbs: Basil, Bay leaves, Borage, Chives, Coriander, Dill, Fennel, Lemon balm, Lemon grass, Kaffir lime leaves, Marigold flowers, Marjoram (oregano), Mints, Nasturtium leaves, Parsley, Rosemary, Sage, Salad burnett, Sorrel, Tarragon, Thyme. Root Herbs: Galangal Leafy vegetables: Rucola (rocket), Chervil, Mizuna Teas: Lemon verbena Spices: Turmeric Edible flowers: Dianthus, roses</p>	<p>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)</p>	<p>All States</p>	<p>1.2 L/ha</p>	<p>1.7 L/ha</p>	<p>2.3 L/ha</p>	<p>Apply one pre-emergence (of weeds) treatment prior to sowing and incorporate into the top 5 cm of soil. Use suitable ground application equipment. Ensure equipment is correctly calibrated. Use lower rates of Smart Trifluralin 480 when short residual control is required. Increase the rate when longer residual control is required. Rotate herbicide mode of action groups with and across growing seasons. The sensitivity of some species and varieties of the crops to be treated have not been fully evaluated. It is advisable to treat a small number of plants to ascertain their reaction before treating the whole crop.</p>
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**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

**WITHHOLDING PERIODS:**

**HARVEST: NOT REQUIRED WHEN USED AS DIRECTED.**

**GRAZING:**

**Swedes and turnips: DO NOT GRAZE OR CUT TREATED CROPS FOR STOCK FOOD. Tea tree: DO NOT GRAZE TREATED AREAS OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION. Industrial hemp: DO NOT GRAZE TREATED AREAS FOR 14 DAYS AFTER APPLICATION.**

**Other crops: NOT REQUIRED WHEN USED AS DIRECTED.**

**EXPORT OF TREATED PRODUCE**

**Growers should note that maximum residue limits (MRLs) or import tolerances may not exist in all markets for edible produce treated with this product. If you are growing edible produce for export, please check with Crop Smart Pty Ltd for the latest information on MRLs and import tolerances before using this product.**

## 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 12MM WIDE, USUALLY WITH PRESS WHEELS) WHERE APPLICATION MAY OCCUR UP TO 24 HOURS BEFORE INCORPORATION BY THE SOWING PROCESS.

### INCORPORATION TABLE

1. Prior to furrowing out: 2 workings at an angle required using Offset or Tandem disc harrows.
2. After furrowing out: 2 workings required using GoDevil discs or Lilliston cultivators set at 10 cm depth.
3. Rotary Hoe: 1 working required at 5-7.5cm depth. Sugar Cane: 7.5-13cm depth.
4. 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.
5. Heavy Diamond or Stump Jump Harrows: (weighted 20-30kg per section) at 10-13 km/h speed. Then cross work with offset or tandem disc harrows set to 7.5-15cm depth at speed 6.5-10km per hour.
6. Weighted Heavy Diamond or Stump Jump Harrows: (weighted with 20-30kg per section) at 10-13km/hr. Cross work with combine at 5-7.5cm depth at speed of 10-13km/hr.
7. Disc Ratoon Cultivator: 2 workings needed with discs and cultivator set at 7.5-13cm depth.
8. 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.
9. Rotary Hoe: 1 working needed at 5-10cm depth.
10. Offset Discs (Bumpers): 2 workings needed at depth of 7.5-13cm.
11. Incorporation by sowing (IBS) on suitably prepared seedbed with heavy diamond harrows trailing or as a separate operation.
12. 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.
13. Incorporation by Sowing (IBS) with knife or blade points. Use press wheels to avoid dragging treated 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 furrow as chemical displacement from this zone occurs. Stubble coverage above 40-50% ground cover can reduce weed control below acceptable levels. **Note b.** - A knife or blade point is 12mm or less, has no wings, inverted T or blade, and is generally placed on a minimum 20cm type spacing. **c.** DO NOT use with disc openers/planting equipment.

### 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 and stubble coverage level. For minimum tillage/stubble retention seeding systems use of higher water volumes may help reduce the impact of stubble. 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 Trifluralin 480 are always recommended. Agronomic practices that reduce the weed seed bank in the soil prior to the use of Trifluralin 480 will result in higher weed control levels from 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:** Smart Tri-Allate 500 EC Herbicide, Smart Chlorsulfuron 750 WG Herbicide, Smart Triasulfuron 750 WG Herbicide, Diuron Flowable (500g/L), Simazine Flowable (500g/L), Smart Paraquat 250 Herbicide, Smart Combination 250 Herbicide, Smart Flumetsulam 800 WG Herbicide, Smart Ipyr 750 WG Herbicide, Bladex, Smart Metribuzin 750 WG Herbicide, Smart Glyphosate 450 Herbicide

**Insecticides:** Smart Chlorpyrifos 500EC.

### **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**

<b>GROUP</b>	<b>3</b>	<b>HERBICIDE</b>
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Smart Trifluralin 480 EC Herbicide is a member of the DINITROANILINES group of herbicides. Smart Trifluralin 480 has the inhibitors of tubulin formation mode of action. For weed resistance management Smart Trifluralin 480 is a Group 3 herbicide. Some naturally-occurring weed biotypes resistant to Smart 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 Smart Trifluralin 480 or other Group 3 herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Crop Smart Pty Ltd accepts no liability for any losses that may result from the failure of Smart 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.

**DO NOT** apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants / crops, cropping lands or pastures.

Direct spray contact or even slight drift may cause severe injury or destruction of any growing crop or other desirable plants including trees and native vegetation.

**DO NOT** use when breeze is blowing towards nearby desirable plants.

## **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 cool well-ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight.

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 supply for refill or storage.

## **SAFETY DIRECTIONS**

Harmful if swallowed. Poisonous if inhaled. Will damage eyes, nose and throat. Will irritate the skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. DO NOT inhale vapour or spray mist. When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow length chemical resistant gloves, goggles and half-piece respirator. When using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow length chemical resistant gloves. 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, goggles, respirator and if rubber wash with detergent and warm water, and contaminated clothing.

## **FIRST AID**

If poisoning occurs contact a doctor or Poisons Information Centre. Phone 13 11 26, New Zealand 0800 764 766. If swallowed DO NOT induce vomiting. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

## **SAFETY DATA SHEET**

For further information, refer to the Safety Data Sheet which is available from the supplier.

**CONDITION OF SALE**

Crop Smart Pty. Ltd. ("Crop Smart") shall not be liable for any loss, injury, damage or death whether consequential or otherwise whatsoever, or howsoever arising 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 conditions that the purchaser does not rely on Crop Smart'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 Crop Smart has any authority to alter these conditions.



#### **Additional GHS Statement**

May be fatal if swallowed and enters airways.

IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes.

Very toxic to aquatic life with long lasting effects. Avoid release to the environment.

**IN AN EMERGENCY  
DIAL 000  
POLICE OR FIRE BRIGADE**

**EMERGENCY CONTACT CHEMWATCH  
1800 951 288  
AUSTRALIA WIDE, 24 HOURS**

