

Product Name: Surefire Sulfosulfuron 750 WG Herbicide
APVMA Approval No: 94024/141270



Label Name:	Surefire Sulfosulfuron 750 WG Herbicide
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Signal Headings:	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE CONSTITUENT: 750 g/kg SULFOSULFURON
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Mode of Action:	GROUP 2 HERBICIDE
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Statement of Claims:	Selective herbicide for the control of certain weeds in wheat and triticale.
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Net Contents:	NET CONTENTS: 500 g
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Restraints:	<p>RESTRAINTS</p> <p>DO NOT apply more than once per season. DO NOT apply to crops under sown with legumes. DO NOT spray when very dry conditions prevail. DO NOT use on furrow or flood-irrigated crops. DO NOT apply to soils with pH over 8.5. Weed control may be reduced if rainfall occurs soon after application.</p> <p>SPRAY DRIFT RESTRAINTS</p> <p>Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift</p> <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.</p>
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DO NOT apply by aircraft.

Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	Withholding Periods: NOT REQUIRED WHEN USED AS DIRECTED.
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Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>RESISTANT WEEDS WARNING GROUP 2 HERBICIDE</p> <p>Surefire Sulfosulfuron 750 WG Herbicide is a member of the sulfonylurea group of herbicides and has the ALS inhibitor mode of action. For weed resistance management, this product is a Group 2 herbicide. Some naturally-occurring weed biotypes resistant to Surefire Sulfosulfuron 750 WG Herbicide and other Group 2 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 Surefire Sulfosulfuron 750 WG Herbicide or other Group 2 herbicides. To prevent or at least minimise the risk of resistant weeds occurring, use Surefire Sulfosulfuron 750 WG Herbicide tank mixes (if appropriate) and/or rotations with herbicides having different modes of action effective on the same weed species. DO NOT make more than one application of an ALS inhibitor herbicide to a crop, either pre-sowing incorporated by sowing or post crop and weed emergence. Since the occurrence of resistant weeds is difficult to detect prior to use, PCT Holdings Pty Ltd accepts no liability for any losses that may result from the failure of Surefire Sulfosulfuron 750 WG Herbicide to control the resistant weeds. Advice as to strategies and alternative treatments that can be used should be obtained from your local farm chemical supplier, consultant, local Department of Agriculture, Department of Primary Industries, or a PCT Holdings Pty Ltd representative.</p>
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Precautions:	
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Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</p> <p>DO NOT apply or drain or flush equipment on, or near desirable trees or other plants, where their roots may extend or in situations whereby movement of soil, or seepage, absorption of the herbicide may occur. 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.</p> <p>Dangerous to plants, including aquatic plants.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <p>DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.</p>
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Storage and Disposal:	<p>STORAGE AND DISPOSAL</p> <p>KEEP OUT OF REACH OF CHILDREN. Store in closed, original containers in a cool, well-ventilated area away from fertilisers, pesticides and seeds.</p> <p>DO NOT store for prolonged periods in direct sunlight. DO NOT re-use containers. Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.</p>
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Safety Directions:	<p>SAFETY DIRECTIONS</p> <p>Will irritate eyes. Avoid contact with eyes. DO NOT inhale dust. Wash hands after use.</p>
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First Aid Instructions:	<p>FIRST AID</p> <p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.</p>
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First Aid Warnings:	
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DIRECTIONS FOR USE

PRE-EMERGENT APPLICATION

CROP	WEEDS CONTROLLED/ SUPPRESSED	RATE	CRITICAL COMMENTS
Wheat Triticale (Vic, NSW, WA, SA, Tas only)	Barley grass* Brome grass* Wild turnip	25 g/ha	Apply to bare soil prior to sowing or at sowing and incorporate by the sowing operation. Application should not be made to ridged or excessively cloddy soil. In conservation tillage situations where weeds and grasses have emerged apply as a tank mixture with the recommended rate of 540 g/L Glyphosate (K salt) prior to sowing.
	Weeds as above, plus the control of Wild oats	25 g/ha plus 1.6 L Tri-allate (500 g/L)	For best results follow the Tri-allate (500 g/L) label directions for incorporation.
	Weeds as above plus: Annual ryegrass Canary grass Fumitory Wireweed (Hogweed)	25 g/ha plus trifluralin (480 g/L)	For best results follow the trifluralin label for Incorporation.

* Suppression only

POST-EMERGENT APPLICATION

Apply to wheat and triticale from early crop emergence to the 5 leaf/early tillering growth stage (Z11-15, 22).

USE THE SURFACTANT/WETTING AGENT – POST EMERGENT

Always add 471 g/L Paraffin Oil adjuvant (1-2% volume/volume) of final spray volume.

CROP	WEEDS CONTROLLED/ SUPPRESSED	STAGE OF WEED GROWTH	RATE	CRITICAL COMMENTS
Wheat Triticale (Vic, NSW, WA, SA, Tas only)	Amsinckia, Wild mustard (<i>Sinapis arvensis</i>)*	Apply at the cotyledon to 4 leaf stage	25 g/ha For pH >7.0 – 20 g For pH <7.0 – 25 g 20 g/ha	Optimum results will be obtained if good soil moisture exists at, and after, application. A follow-up spray with a different herbicide may be necessary to control subsequent germinations. When treating dense infestations of silver grass use water volumes of at least 70 L/ha and small droplets to improve coverage. Surefire Sulfosulfuron 750 WG Herbicide will provide good control of volunteer field peas. However, a small proportion of plants may survive and require a follow-up spray with a different herbicide to eliminate the potential for grain contamination.
	Barley grass*, Silver grass (<i>Vulpia bromooides</i>), Wild oats*	Apply at the 1- 4 leaf stage, (Z11-14)		
	Brome grass* (<i>Bromus diandrus</i> & <i>B. rigidus</i>)	Apply at the 1- 3 leaf stage, (Z11-13)		
	Volunteer canola (except canola tolerant to Group 2 herbicides), Wild radish, Wild turnip	Apply at the cotyledon to 4 leaf stage		
	Volunteer field peas	Apply at the 1- 3 leaf stage, (Z11-13)		

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

CROP ROTATION GUIDELINES

Where the product is applied at the rate of 20 to 25 g/ha: Wheat and triticale can be planted the following season without restrictions. For other specified crops the Surefire Sulfosulfuron 750 WG Herbicide treated area may be replanted after the interval indicated in the table below. These recommendations are made on the assumption that Surefire Sulfosulfuron 750 WG Herbicide is applied to a wheat or triticale crop that reaches maturity in the season of application.

PLANT BACK PERIOD: Vic, NSW, WA, SA, TAS only

Soil pH (1:5 soil-water suspension method)	Replant interval	Minimum rainfall*	CROP
6.5 or less	10 months	300mm	Canola, Chickpeas, Lentils, Lupins, Oats, Peas, Sub-clover**
	12 months		Barley, Faba beans
6.5 to 8.5	10 months	300 mm	Cereal rye
	22 months	600 mm	Barley, Canola, Chickpeas, Faba beans, Lentils, Medic **, Oats, Peas, Vetch

*minimum rainfall required between Surefire Sulfosulfuron 750 WG Herbicide application and the sowing of the plant back crop.

** Includes natural regeneration of sub-clover and medics. DO NOT apply to soils with a pH (water) > 8.5.

For all other crops refer to PCT Holdings Pty Ltd for further advice.

GENERAL INSTRUCTIONS

Surefire Sulfosulfuron 750 WG Herbicide is a selective herbicide absorbed by foliage and roots. It is rapidly translocated and acts by inhibiting acetolactate synthase (ALS), an enzyme necessary for root and shoot growth in sensitive plants. Surefire Sulfosulfuron 750 WG Herbicide is a water dispersible granular herbicide for use in wheat and triticale. It can be used as a pre-plant, incorporated by sowing, for the control of wild turnip and suppression of barley grass, brome grass, wild mustard (*Sinapis arvensis*) and wild oats.

PRE-EMERGENT

Apply to bare soil prior to sowing or at sowing and incorporate by the sowing operation to give thorough mixing. If applied to dry soil and sowing is to be delayed, incorporate immediately after spraying to prevent loss by wind erosion. For best results apply to bare soil when follow-up rain is likely to occur within 7-10 days. Weeds may emerge and will become stunted and uncompetitive soon after application although final results may not show for some weeks.

POST EMERGENT

Weeds should be young and actively growing. A follow up spray with a suitable herbicide may be necessary to control subsequent germinations. Best weed control is obtained when rainfall wets the soil to a depth of 5 to 7.5 cm within 7-10 days of application. Weeds will become stunted and uncompetitive soon after application although final results may not show for some weeks. When treatment is delayed or where weeds are not actively growing due to adverse conditions, for example, dry, waterlogged, frosty or diseased conditions, nutrient deficiency, high insect pressure or previous herbicide treatment, reduced levels of control may result. Surefire Sulfosulfuron 750 WG Herbicide will remain in the soil for a period of time. The persistence of Surefire Sulfosulfuron 750 WG Herbicide in the soil is dependent on various environmental conditions e.g., soil pH, soil moisture, soil temperature and organic matter. Crops other than wheat and triticale may be very sensitive to low soil concentrations of Surefire Sulfosulfuron 750 WG Herbicide, thus prior to using the product, careful consideration should be given to crop rotation plans (see Crop Safety and Crop Rotation Guidelines).

MIXING

Surefire Sulfosulfuron 750 WG Herbicide is a water dispersible granular herbicide which mixes readily with water and is applied as a spray.

1. Partly fill the spray tank with water.
2. Start the agitation.
3. Add the correct amount of product to the spray tank with the agitation system running.
4. Continue agitation while topping up the tank with water and while spraying.
5. In tank mixes, Surefire Sulfosulfuron 750 WG Herbicide must be in suspension before adding the companion product or surfactant (e.g., 471 g/L Paraffin Oil adjuvant).
6. Use the spray mix within 24 hours of preparation.

APPLICATION

Apply by boom spray producing a MEDIUM spray quality. Ensure good spray coverage is obtained.

Apply using 40 to 100 litres of water per hectare. Avoid overlapping of boom runs. Use higher water volumes where crop or weed density is high.

DO NOT apply by aircraft.

SPRAYER CLEANUP

Where the sprayer is being used to spray wheat or triticale crops, rinse the sprayer thoroughly with water.

Where the sprayer is being used to spray crops other than wheat or triticale:

1. Drain tank and rinse tank and spray boom with clean water for at least 10 minutes.
2. Fill the tank with clean water and add to it 300 mL of household chlorine bleach (containing 4% chlorine) per 100 L of water. Rinse hoses and boom and leave in tank for 15 minutes whilst agitating. Drain through nozzle.
3. Repeat step 2 and then rinse thoroughly with clean water to remove all traces of chlorine bleach.
4. Nozzles and filters should be cleaned separately.
5. Dispose of all water used for cleaning.

Caution: DO NOT use chlorine bleach with ammonia. All traces of liquid fertiliser containing ammonia, ammonium nitrate or ammonium sulphate must be rinsed with water from the mixing and application equipment before adding chlorine bleach solution. Failure to do so will release a gas with a musty chlorine odour which can cause eye, nose and lung irritation. DO NOT clean equipment in an enclosed area.

COMPATIBILITY

Read and follow all label directions, restraints, plant-back and withholding periods and safety directions for all tank-mix products. In tank mixes, Surefire Sulfosulfuron 750 WG Herbicide must be in suspension before adding the companion product or surfactant.

Pre-emergent:

Surefire Sulfosulfuron 750 WG Herbicide is compatible with the following products:

- 500g/L Tri-allate,
- 450 g/L Glyphosate (IPA salt), 540 g/L Glyphosate (K salt), 680 g/kg Glyphosate (mono-ammonium salt), 250 g/L Paraquat dichloride,
- 135 g/L Paraquat dichloride/115 g/L Diquat dibromide,
- 480 g/L Trifluralin and Trifluralin in liquid hydrocarbon.

Post emergent:

Surefire Sulfosulfuron 750 WG Herbicide is compatible with the following products:

- as a two-way mixture with 300 g/L clopyralid (triisopropanolamine salt) (up to 300 mL/ha)
- 500 g/L MCPA (iso octyl ester) (up to 350 mL/ha)
- 250 g/L MCPA (ethyl hexyl ester) + 25 g/L Diflufenican in 325 g/L liquid hydrocarbons/150 g/L n-methyl-2-pyrrolidone (up to 750 mL/ha) for treatment of brome grass, wild oats, wild mustard (*Sinapis arvensis*), wild radish and wild turnip. Some increased temporary crop yellowing may occur.

Always add 471 g/L Paraffin Oil adjuvant at 1-2 L/100 L (1-2% volume/volume) of final spray volume. Surefire Sulfosulfuron 750 WG Herbicide may also be mixed with 653 g/L Paraffin oil/217 g/L polyethoxylate surfactant product at 2 L/100 L (2% volume/volume) of final spray volume.

Incompatible:

The following herbicides and insecticides are incompatible with Surefire Sulfosulfuron 750 WG Herbicide:

- 400 g/kg Tralkoxydim WG
- 375 g/L and 500g/L Diclofop-methyl
- 500 g/L Terbutryn SC
- 290 g/L Omethoate
- dicamba, dimethoate

CROP SAFETY

DO NOT use on winter cereals undersown with legume pasture crops e.g., medics, clovers, lucerne.

DO NOT use on barley or oats. Surefire Sulfosulfuron 750 WG Herbicide is effective on a range of plants, even at low rates of application. Since many rotational crops are sensitive, growers will need to consider the soil carry-over effects on subsequent crops. Below average rainfall, high levels of applied Surefire Sulfosulfuron 750 WG Herbicide (greater than the recommended rates), pH greater than 6.5 and low soil temperatures and low rainfall all increase the carry-over risk. Where Surefire Sulfosulfuron 750 WG Herbicide is used on soil types with pH greater than 8 (1:5 soil:water suspension method) and less than 300 mm of rainfall has occurred since application, further advice should be sought from PCT Holdings Pty Ltd regarding crop rotations, except for wheat and triticale.

Note: Some crop yellowing or crop retardation may occur where a stress factor such as waterlogging, Rhizoctonia, take-all, cereal cyst nematode, nutrient deficiency or trace element deficiency is already present. Early season crop retardation may occur where the product is used on soils with a pH greater than 8 and which are prone to zinc deficiency. See Crop Rotation Guidelines for further information.