

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

SULFOSULFURON 750 WG HERBICIDE

ACTIVE CONSTITUENT: 750g/kg SULFOSULFURON

GROUP **2** HERBICIDE

For the control of certain weeds in Wheat and Triticale.

APVMA Approval No.: 67980/57217

Pack Size: 500g; 1kg; 2kg



TITAN AG Pty Ltd | ABN 57 122 081 574
15/16 Princes Street, Newport NSW 2106
Tel (02) 9999 6655 | Fax (02) 9999 0483
titanag.com.au

IN A TRANSPORT EMERGENCY

DIAL 000

POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING
NOT A DANGEROUS GOOD
ACCORDING TO THE AUSTRALIAN
DANGEROUS GOODS (ADG) CODE
FOR TRANSPORT BY ROAD AND RAIL

DIRECTIONS FOR USE

Restrictions:

- DO NOT apply more than once per season.
 - DO NOT apply to crops undersown 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 rain fall occurs soon after application.

Pre-emergent application

CROPS	WEEDS CONTROLLED/SUPPRESSED	RATE/ha	CRITICAL COMMENTS
Wheat, Triticale (NSW, VIC, TAS, SA, WA only)	Barley Grass*, Brome Grass*, Wild Turnip	25g	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 Roundup® PowerMAX prior to sowing.
	Weeds as above plus the control of Wild Oats	25g plus 1.6L of Avadex® Xtra	For best results follow the Avadex Xtra label directions for incorporation.
	Weeds as above plus Annual Ryegrass, Canary Grass, Fumitory, Wireweed (Hogweed)	25g plus 800mL Triflur® 480 or TriflurX®	For best results follow the trifluralin label directions 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 BONZA® at 1-2L/100L (1-2% volume/volume) of final spray volume.

CROPS	WEEDS CONTROLLED/SUPPRESSED	STAGE OF WEED GROWTH	RATE/ha	CRITICAL COMMENTS
Wheat, Triticale (NSW, VIC, TAS, SA, WA only)	Amsinckia, Wild Mustard (<i>Sinapsis arvensis</i>)*	Apply at the cotyledon to 4 leaf stage	25g	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 Silvergrass use water volumes of at least 70L/ha and small droplets to improve coverage. TITAN 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*, Silvergrass (<i>Vulpia bromoides</i>), Wild Oats*	Apply at the 1-4 leaf stage (Z11-14)	25g	
	Brome Grass* (<i>Bromus diandrus</i> & <i>B. rigidus</i>)	Apply at the 1 to 3 leaf stage (Z11-13)	pH more than 7.0-20g pH less than 7.0- 25g	
	Volunteer Canola (except Canola tolerant to Group 2 herbicides), Wild Radish, Wild Turnip	Apply at the cotyledon to 4 leaf stage	20g	
	Volunteer Field Peas	Apply at the 1-3 leaf stage	20g	

* Suppression 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.

Crop Rotation Guidelines

Where the product is applied at the rate of 20 to 25g/ha: Wheat and Triticale can be planted the following season without restrictions. For other specified crops, the TITAN 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 TITAN 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 ¹	Crop
6.5 or less	10 months	300mm	Canola, Chickpeas, Lentils, Lupins, Oats, Peas, Sub-clover*
	12 months	300mm	Barley, Faba Beans
6.5 to 8.5	10 months	300mm	Cereal Rye
	22 months	600mm	Barley, Canola, Chickpeas, Faba Beans, Lentils, Medic*, Oats, Peas, Vetch

¹ Minimum rainfall required between TITAN Sulfosulfuron 750 WG Herbicide application and the sowing of the plantback 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 TITAN AG for further advice.



GENERAL INSTRUCTIONS

TITAN 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. TITAN 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 and Brome Grass, or as a post-emergent for the control of Silvergrass, Wild Radish and Wild Turnip, and suppression of Barley Grass, Brome Grass, Wild Mustard (*Sinapsis 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 moist 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. Use the higher rate under heavy weeds pressure and for larger weeds. 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 7.5cm 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.

TITAN Sulfosulfuron 750 WG Herbicide will remain in the soil for a period of time. The persistence of TITAN Sulfosulfuron 750 WG Herbicide in the soil is dependent on various environmental conditions eg. soil pH, soil moisture, soil temperature and organic matter. Crops other than Wheat and Triticale may be very sensitive to low soil concentrations of TITAN 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

TITAN 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, TITAN Sulfosulfuron 750 WG Herbicide must be in suspension before adding the companion product or surfactant (eg. Bonza).
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 300mL of household chlorine bleach (containing 4% chlorine) per 100L 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, TITAN Sulfosulfuron 750 WG Herbicide must be in suspension before adding the companion product or surfactant.

Pre-emergent: TITAN Sulfosulfuron 750 WG Herbicide is compatible with TITAN Tri-Allate 500 EC Herbicide, TITAN Glyphosate 450 Herbicide, TITAN Glyphosate 540 K Salt Herbicide, TITAN Paraquat 250 Herbicide, TITAN EOS Herbicide, TITAN Trifluralin 480 Selective Herbicide.

Post-emergent: TITAN Sulfosulfuron 750 WG Herbicide is compatible as a two way mixture with Archer®/Lontrel* (up to 300mL/ha), LVE MCPA (up to 350mL/ha) and TITAN Diflufenican + MCPA Selective Herbicide (up to 750mL/ha) for treatment of Brome Grass, Wild Oats, Wild Mustard (*Sinapsis arvensis*), Wild Radish and Wild Turnip. Always add BONZA at 1-2L/100L (1-2% volume/volume) of final spray volume. TITAN Sulfosulfuron 750 WG Herbicide may also be mixed with DC-Trate at 2L/100L (2% volume/volume) of final spray volume. Some increased temporary crop yellowing may occur when TITAN Sulfosulfuron 750 WG Herbicide is tank mixed with TITAN Diflufenican + MCPA Selective Herbicide.

INCOMPATIBLE

The following herbicides and insecticides are incompatible with TITAN Sulfosulfuron 750 WG Herbicide: TITAN Tralkoxydim 400 WG Herbicide, Dicamba, TITAN Diclofop-Methyl 500 EC Selective Herbicide, TITAN Terbutryn 500 SC, Le-mat* and Dimethoate.

Crop Safety

DO NOT use on winter cereals undersown with legume pasture crops eg. Medics, Clovers, Lucerne. DO NOT use on Barley or Oats.

TITAN 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 TITAN 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 TITAN Sulfosulfuron 750 WG Herbicide is used on soil types with pH greater than 8 (1:5 soil:water suspension method) and less than 300mm of rainfall has occurred since application, further advice should be sought from TITAN AG regarding crop rotations, except for Wheat and Triticale.

Note: Some crop yellowing or crop retardation may occur where a stress factor such as water-logging, 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.

RESISTANCE WEEDS WARNING

TITAN Sulfosulfuron 750 WG Herbicide is a member of the sulfonyleurea 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 TITAN 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 TITAN Sulfosulfuron 750 WG Herbicide or other Group 2 herbicides. To prevent or at least minimise the risk of resistant weeds occurring, use TITAN 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, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of TITAN 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 TITAN AG representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply or drain or flush equipment on, or near desirable trees or other plants, where their roots may extend or in situations where by 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. Dangerous to plants, including aquatic plants.

GROUP 2 HERBICIDE



PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

STORAGE AND DISPOSAL

Store in closed, original containers in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT re-use containers. Triple rinse containers before disposal, and add rinsings to spray tank. DO NOT dispose of undiluted chemical on-site. Break, crush or puncture the containers and bury at 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.

SAFETY DIRECTIONS

Will irritate eyes. Avoid contact with eyes. DO NOT inhale dust. Wash hands after use.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Sulfosulfuron 750 WG Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit www.titanag.com.au

CONDITIONS OF SALE: TITAN AG 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 TITAN AG'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 TITAN AG Pty Ltd has any authority to add to or alter these conditions.

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Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: Very toxic to aquatic life with long lasting effects. **Precautionary:** Avoid release to the environment. Collect spillage. Dispose of contents/container in accordance with local/regional/national regulations.

