## **READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

### TITAN

# BENSULFURON 600WG

ACTIVE CONSTITUENT: 600g/kg BENSULFURON-METHYL



For the control of Arrowhead, Dirty Dora and Star Fruit and suppression of Cumbungi and Common Spikerush in aerially sown Rice as per Directions for Use. APVMA Approval No.: 80246/100466 Pack Size: 500g; 750g; 1kg; 2kg; 5kg; 10kg



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DIAL OOO
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 Restraints:

DO NOT store a suspension of TITAN Bensulfuron 600WG Herbicide for more than 2 days otherwise significant breakdown may occur. DO NOT apply to crops under stress (Refer to Crop Safety Section for details).

DO NOT store tankmixes of TITAN Bensulfuron 600WG Herbicide.

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
Rice	Arrowhead (Sagittaria montevidensis),	50 to 85g/ha	NSW, VIC only	For best results apply early post crop emergence when weeds are small, up to 3 leaf stage.
	Dirty Dora			Apply by air to flooded paddy when Rice has reached 2 leaf or later stage.
	( <i>Cyperus difformis</i> ), Star Fruit ( <i>Damasonium minus</i> )	n <i>minus</i> ) only serush <i>suta</i> )		Use the higher rate where paddy water is muddy/turbid or weeds are larger. In the top bays for more reliable weed control use the maximum label rate.
	Cumbungi			Pre-emergence suppression only.
	( <i>Typha</i> spp.) Suppression only			Will not suppress established plants or regrowth from rhizomes.
	Common Spikerush ( <i>Eleocharis acuta</i> ) 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.

#### **GENERAL INSTRUCTIONS**

Under muddy/turbid water situations or where treatment is delayed beyond the recommended weed stage, or where weeds are not actively growing, or where Star Fruit are present in very high populations (i.e. Western Murray Valley) results may be slow to appear and weeds may be only stunted or suppressed. Proper water management is essential for maximum weed control with TITAN Bensulfuron 600WG Herbicide. Ensure adequate water depth in the bays is achieved at least 1 full day before application.

Water movement to and within bays should cease one full day prior to application. No additional water is to be added or drained from treated bays for a minimum of 5 days after application. If cold conditions are experienced after application, HOLD the water as long as possible and introduce fresh water slowly. Water levels can then be restored to depths consistent with normal rice growing requirements.

DO NOT allow tailwater drainage from the paddy for 5 days following treatment with TITAN Bensulfuron 600WG Herbicide.

Crops other than rice may be extremely sensitive to low concentrations of TITAN Bensulfuron 600WG Herbicide residues in the sprayer.

See "Sprayer Clean-up" section.

TITAN Bensulfuron 600WG Herbicide can be applied early to late post-

emergence (2 leaf – mid tillering) of the crop with adequate crop safety. However, applications made to weeds prior to the 3 leaf growth stage give best weed control and optimise crop yield potential.

#### **RESISTANT WEEDS WARNING**

TITAN Bensulfuron 600WG Herbicide is a member of the sulfonylurea group of herbicides. The product has the ALS inhibitor mode of action.



For weed resistance management, the product is a Group 2 herbicide. Some naturally-occurring weed biotypes resistant to the product 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 this product or other Group 2 herbicides.

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 this product to control resistant weeds.

Strategies to minimise the risk of herbicide resistance are available. Consult your farm chemical supplier, consultants, local Department of Agriculture or Primary Industries, or local TITAN AG representative.

#### **CROP SAFETY**

DO NOT apply to crops that are stressed by any cause (such as severe weather conditions, excessive soil acidity or alkalinity, poor nutrient status, disease or insect damage) as crop injury may result.

When treatment is followed by severe stress, crop yellowing or growth retardation may occur. Crops normally recover without loss in yield. After treatment with TITAN Bensulfuron 600WG Herbicide transient root growth inhibition and associated lodging of the seedling may occur, however the rice plant should quickly recover and will suffer no permanent check to its development.

#### SPRAY PREPARATION

TITAN Bensulfuron 600WG Herbicide is a dry flowable formulation which can be applied either by conventional wet application equipment or by TITAN AG certified direct dry application (DDA) equipment.

#### **Conventional Spray Application (Ground or Aerial)**

Partially fill the spray tank with water. Measure the amount of TITAN Bensulfuron 600WG Herbicide required for the area to be sprayed. Add the correct amount of TITAN Bensulfuron 600WG Herbicide to the spray tank with the agitation system engaged.

Top up to the correct volume of water. The material must be kept in suspension at all times by continuous agitation. The use of a surfactant/wetting agent is not necessary.

#### **SCWIIRT Equipment**

Mix the required amount of TITAN Bensulfuron 600WG Herbicide in water (total volume of 5 to 10L/ha). The material must be kept in suspension at all times by continuous agitation. The use of a surfactant/wetting agent is not necessary.

#### **Direct Dry Application (DDA)**

Add TITAN Bensulfuron 600WG Herbicide direct to the direct dry application hopper.

#### **APPLICATION INSTRUCTIONS**

Avoid spraying in still conditions and in winds likely to cause drift. Turn off application equipment whilst passing over irrigation channels, creeks and dams.

#### **Conventional Spray Application**

Apply by air in a minimum of 20L/ha water to flooded bays. Application using equipment set to produce coarse droplets will increase direct application onto the water surface and minimise contact with emerged crop or weed foliage. DO NOT use ground or aerial SCWIIRT methods (including a Bickley boom) if excess rice and weed vegetation will impede redistribution of TITAN Bensulfuron 600WG Herbicide in water resulting in inadequate control.

#### Aerial application

TITAN Bensulfuron 600WG Herbicide can be applied either by a fixed wing aircraft or by a helicopter (also refer to section on SCWIIRT application to permanent water). Apply either by a blanket spray (minimum of 20L/ha water) or SCWIIRT technique (minimum of 10L/ha water). Apply by air to the flooded paddy when rice has reached 2 leaf or later stage.

For blanket spraying the aircraft or helicopter boom should be fitted with multiple nozzles adjusted to give a relatively coarse droplet size eg. CP solid stream nozzle that will increase direct application onto the water surface and minimise contact with emerged crop or weed foliage.

For a fixed wing SCWIIRT application a Bickley boom that conforms to the following specifications is recommended.

- Two nozzles mounted on droppers, one either side with droppers positioned just outside the first boom hanger (28-35% of wingspan).
- Dropper length approximately 40-60cm or lower below the trailing edge of the wing.
- Solid stream nozzles with bore sufficient to apply desired volume at a pressure of 240 to 310kPa (35 to 45 psi).



- Check valves (Spraying Systems diaphragm type 12328, ¾ inch) located behind nozzles to eliminate "trailing" after shut off.
- Spray at a wheel height of 2m above the field surface.
- Swath widths of approximately 25m are recommended.

DO NOT use a Bickley boom when applying to permanent water where excess rice and weed vegetation could impede the redistribution of TITAN Bensulfuron 600WG Herbicide in water resulting in unsatisfactory control of aquatic weeds.

#### SCWIIRT application to permanent water

Apply by tractor, 4 wheel agricultural motorbike or Helicopter. Apply to flooded bay at a distance of 20 to 30m between runs. Position dripper nozzles no more than 50cm from the water surface and maintain pressure at or below 200kPa (30 psi or 2 bar).

#### Ground application (Conventional Spray Boom)

Apply in a minimum of 40L/ha water to flooded bays.

#### **Direct Dry Application (DDA)**

TITAN Bensulfuron 600WG Herbicide may only be applied direct dry by air using only TITAN AG certified equipment.

Before applying TITAN Bensulfuron 600WG Herbicide direct dry by air, calibrate equipment as described by the equipment manufacturer.

DO NOT mix TITAN Bensulfuron 600WG Herbicide to be applied direct dry by air with any liquid carrier (such as water or oil) and DO NOT mix with any surfactant or crop oil.

Simultaneous applications of TITAN Bensulfuron 600WG Herbicide via DDA and spray application of other compatible pesticides are permissible.

#### SPRAYER CLEANUP

#### **Spray Application Equipment**

To avoid subsequent injury to crops other than rice, immediately after spraying thoroughly remove all traces of TITAN Bensulfuron 600WG Herbicide from mixing and spray equipment as follows:

- 1. Drain tank, then flush tank, filters, boom and hoses with clean water for a minimum of 10 minutes.
- 2. Fill the tank with clean water then add 300mL household chlorine bleach (containing 4% chlorine) per 100L of water. Flush through boom, filters and hoses then allow to stand for 15 minutes with agitation engaged, then drain.
- 3. Repeat step 2.
- 4. Nozzles and screens should be removed and cleaned separately. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush through hoses and boom.

#### **Direct Dry Application (DDA) Equipment**

Follow equipment cleanup instructions provided by equipment manufacturer.

#### COMPATIBILITIES

TITAN Bensulfuron 600WG Herbicide is compatible with the herbicides molinate and thiobencarb and the insecticides chlorpyrifos, diazinon and trichlorphon.

#### PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS

Injury to or loss of desirable trees or vegetation may result from failure to observe the following.

DO NOT apply irrigation tailwaters to crops other than rice.

DO NOT apply or drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

DO NOT apply or allow spray to drift onto adjacent crops and non-target desirable plants, or onto agricultural land scheduled to be planted to other crops as injury to the crop may occur.

DO NOT sow TITAN Bensulfuron 600WG Herbicide treated paddies to any other crop for four months following TITAN Bensulfuron 600WG Herbicide application, as crop injury may result.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate any body of water by spraying (other than rice fields), cleaning of equipment or disposal of waste.

#### **STORAGE AND DISPOSAL**

KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a dry, well-ventilated area, as cool as possible out of direct sunlight. Store in a locked room or place away from children, animals, food, foodstuffs, seed and fertilisers. Triple-rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemical 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 500mm 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 wth relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

#### SAFETY DIRECTIONS

Product will irritate the eyes. DO NOT inhale dust. Whe opening the container, preparing the spray and using the prepared spray wear goggles. If product in eyes wash out immediately with water. Wash hands after use. After each day's use, wash goggles.

#### **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 Bensulfuron 600WG Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit 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.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects. <u>Precautionary Statement</u>: Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves. IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see on this label). Collect spillage. Dispose of contents/container in accordance with local/regional/national/international regulations.



