# **POISON**

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

TITAN

# FLUMIOXAZIN 500 WG HERBICIDE ACTIVE CONSTITUENT: 500g/kg FLUMIOXAZIN GROUP 14 HERBICIDE



For rapid knockdown and control of various grass and broadleaved weeds when mixed with certain glyphosate or paraquat/diquat herbicides, and for control of volunteer Cotton when applied alone, prior to sowing Cotton and its rotation crops, or for rapid knockdown and control of various broadleaved weeds when applied as a directed spray in cotton as per the Directions for Use table.

APVMA Approval No.: 87182/132965

Pack Size: Water soluble bags either in Aluminium foil bag or PE bag

500g (10 x 50g); 1kg (10 x 100g); 2kg (10 x 200g); 2.5kg (10 x 250g); 3kg (10 x 300g); 5kg (10 x 500g); 10kg (20 x 500g); 20kg (40 x 500g)



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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**

Restraints: DO NOT apply by air.

DO NOT treat weeds under poor growing or dormant conditions (such as occur in drought, waterlogging, disease, insect damage or following frosts) as reduced control may result.

Weeds should be actively growing at time of treatment.

CROP/SITUATION	WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
PRIOR TO SOWING Barley, Chickpeas, Cotton, Faba Beans, Field Peas, Lentils, Lupins, Maize, Mungbeans, Oats, Sorghum, Soybeans, Sunflowers and Wheat	Follow the Directions For Use of the glyphosate or paraquat/diquat knockdown herbicides, and the addition of TITAN Flumioxazin 500 WG Herbicide will increase the speed of brownout and may improve final control of the following weeds: Bellvine ( <i>Ipomoea plebeia</i> ), Bladder Ketmia ( <i>Hibiscus trionum</i> ), Caltrop ( <i>Tribulus terrestris</i> ), Capeweed ( <i>Arctotheca calendula</i> ), Cow Vine ( <i>Ipomoea lonchophylla</i> ), Doublegee ( <i>Emex australis</i> ), <i>Erodium</i> spp., False Castor Oil ( <i>Datura stromonium</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> ), Marshmallow ( <i>Malva parviflora</i> ), <i>Medicago</i> spp., Noogoora Burr ( <i>Xanthium occidentale</i> ), Paterson's Curse ( <i>Echium plantagineum</i> ), Seedling Lucerne ( <i>Medicago sativa</i> ), Shepherd's Purse ( <i>Capsella bursapastoris</i> ), Sowthistle ( <i>Sonchus oleraceus</i> ), Sunflower ( <i>Helianthus annuus</i> ), Red Root Amaranth ( <i>Amaranthus retroflexus</i> ), Subterranean Clover* ( <i>Trifolium subterraneum</i> ), Volunteer Canola ( <i>Brassica napus</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> ), Wireweed ( <i>Polygonum aviculare</i> )  If one of the above weeds is the dominant weed and there is no specific rate for it on the glyphosate product label, consult the label's generic annual-weed rate range. Select from within this range to suit the weed-stage, weed density, conditions etc of your situation.  *Suppression only		Observe the restraints, rates, mixing and general instructions on the knockdown herbicide product labels.  Best results are obtained when applied to young weeds between the 2- and 6-leaf stage. Addition of TITAN Flumioxazin 500 WG Herbicide to knockdown products will increase the speed at which treated weeds develop visible symptoms of phytotoxicity (compared to the results achieved with tank mix partner products alone) and may improve the final control of certain broadleaved weeds.  To ensure uptake of TITAN Flumioxazin 500 WG Herbicide, DO NOT sow crops for at least one hour after application. Always refer to the tankmix partner product label in case a longer sowing interval is required.  # Always apply with Hasten Spray Adjuvant or Kwickin Spray Adjuvant at 0.5-1L/100L (use the lower rate on smaller, actively growing weeds), or Uptake Spraying Oil at 500mL/100L.

### **ALL STATES**

**Note:** The addition of Titan Flumioxazin 500 WG Herbicide to glyphosate, paraquat or diquat will not help to control large weeds or weeds that have hardened up from stress or established big tap roots. Glyphosate resistant weeds may not be controlled by addition of TITAN Flumioxazin 500 WG Herbicide. See application section for recommendations to get the best results.

CROP / SITUATION	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE (G/HA)	STATE	CRITICAL COMMENTS
PRIOR TO SOWING Cotton, Maize, Mungbeans, Sorghum, Soybeans and Sunflowers	Volunteer Cotton including volunteer Roundup Ready Cotton	Up to 4 leaf	45g/ha of TITAN Flumioxazin 500 WG Herbicide plus an adjuvant	QLD, NSW only	DO NOT apply post-sowing pre-emergent. DO NOT sow crops for at least one hour after application.
					TITAN Flumioxazin 500 WG Herbicide can be tank mixed with glyphosate to control other weeds that are present. Refer to the glyphosate label for the appropriate label rate according to the weeds present.
					# Always apply with Hasten Spray Adjuvant or Kwickin Spray Adjuvant at 0.5-1L/100L (use the lower rate on smaller, actively growing weeds), or Uptake Spraying Oil at 500mL/100L.
Cotton Lay-by application	Noogoora Burr Yellowvine ( <i>T. micrococcus</i> )	<4 leaf <12 leaf	60g/ha plus an adjuvant		Apply as a shielded spray underneath cotton foliage and to inter rows to control late germinating weeds, or weeds that have escaped previous herbicide operations. Best results are obtained when applied to young weeds between the 2- and 6-leaf stage. Vines that have commenced climbing may not be controlled.
	Bellvine Cowvine	<12 leaf <12 leaf	90g/ha plus an adjuvant*		
					<b>Caution:</b> TITAN Flumioxazin 500 WG Herbicide will defoliate any cotton foliage that is contacted by the spray. Shielded sprayers must be operated to ensure that spray does not make contact with cotton foliage.
					DO NOT apply in conditions conducive to drift. DO NOT apply until cotton plants are 40cm tall. DO NOT allow contact with green bark on stems or trunks.
					# Always apply with Hasten Spray Adjuvant or Kwickin Spray Adjuvant at 0.5-1L/100L (use the lower rate on smaller, actively growing weeds), or Uptake Spraying Oil at 500mL/100L.

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

### **WITHHOLDING PERIODS:**

PRE-PLANT KNOCKDOWN: Cereal Grains (Wheat, Barley, Oats, Maize and Sorghum), Pulses (Lupins, Chickpeas, Faba Beans, Field Peas, Lentils and Mungbeans), Oilseeds (Soybeans, Sunflowers) and Cotton

Grazing: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 6 WEEKS AFTER APPLICATION.

Harvest: NOT REQUIRED WHEN USED AS DIRECTED.



### **GENERAL INSTRUCTIONS**

### MIXING

TITAN Flumioxazin 500 WG Herbicide is a water dispersible granule formulation and is contained within a water soluble bag. The water soluble bags dissolve readily in water.

DO NOT handle water soluble bags or expose to moisture because this may cause breakages. DO NOT touch bags with wet hands or place on wet surfaces. DO NOT damage foil sachets that contain the water soluble bags. Protect unused sachets by keeping them in the original container. Open sachets only as needed.

To ensure even mixing, half-fill the spray tank with clean water. Tear open the necessary number of sachets and drop the water soluble bags contained in them into the spray tank without touching the bags. Keep the agitation system engaged. Mix thoroughly until fully dissolved. Add the knockdown herbicide and remaining water. Mix thoroughly. Add spray additive near the end of the filling process to minimize foaming. Always maintain adequate agitation during application and use the tank mix promptly.

### APPLICATION

Apply in a minimum of 80L spray solution per hectare.

Refer to the Directions for Use and General Instructions of the knockdown herbicide label.

As TITAN Flumioxazin 500 WG Herbicide is a contact herbicide, coverage is important. Performance of TITAN Flumioxazin 500 WG Herbicide as a knockdown or with a partner on weeds or on volunteer cotton may be reduced with large droplets and poor coverage. Air induction nozzles that deliver coarse droplets at high travelling speeds, low pressure and low water rates may reduce coverage and herbicide performance. Air induction nozzles can produce variable results when used with oil. Best results with TITAN Flumioxazin 500 WG Herbicide are achieved with medium droplets produced by wide angle flat fan or twin jet nozzles. If the partner herbicide requires coarse droplets, then ensure high water volumes >80L/ha are used.

### **SPRAYER CLEANUP**

When cleaning spraying equipment, wear cotton overalls buttoned to the neck and wrist and elbow-length chemical resistant gloves. After TITAN Flumioxazin 500 WG Herbicide is applied the following steps must be taken to clean the spray equipment.

Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles. Add 1 litre of 3% household ammonia or similar alkaline based tank cleaner for every 100 litres of water, circulate through sprayer for five minutes, then flush all hoses, booms, screens and nozzles for a minimum of fifteen minutes.

Drain tank completely. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for two minutes. Remove all nozzles and screens and rinse them in clean water. Equipment with TITAN Flumioxazin 500 WG Herbicide residue remaining in the system may result in crop injury to the subsequently treated crop.

### COMPATIBILITY

TITAN Flumioxazin 500 WG Herbicide is compatible with: TITAN Glyphosate 450 Herbicide, TITAN Glyphosate 360 Herbicide, TITAN Glyphosate 900 Herbicide, TITAN Glyphosate 540 K Salt Herbicide, TITAN Glyphosate 700 Herbicide, TITAN CC & Liquid OTT Gly 495 K Salt Herbicide, TITAN Max Glyphosate 540K Salt Herbicide, TITAN Paraquat 250 Herbicide, TITAN E0S Herbicide, TITAN Diquat 200 Non-Residual Herbicide, TITAN Amine 625 Selective Herbicide, TITAN LV Ester 680 Herbicide, TITAN Amine 475 Herbicide, adjuvants containing Ethyl and Methyl Esters of fatty acids, Methyl Esters of canola oil fatty acids, at 0.5-1L/100L; or non-ionic surfactant paraffinic oil at 0.5L/100L.

### **RESISTANT WEEDS WARNING**

TITAN Flumioxazin 500 WG Herbicide is a member of the N-phenylphthalimides group of



herbicides. The mode of action of TITAN Flumioxazin 500 WG Herbicide is to inhibit protoporphyrinogen oxidase. For weed resistance management, TITAN Flumioxazin 500 WG Herbicide is a Group 14 Herbicide. Some naturally-occurring weed biotypes resistant to TITAN Flumioxazin 500 WG Herbicide and other Group 14 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 Flumioxazin 500 WG Herbicide or other Group 14 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 TITAN Flumioxazin 500 WG Herbicide to control resistant weeds. Strategies to minimize the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant or local Department of Agriculture.

## **PRECAUTIONS**

**Re-Entry:** DO NOT enter treated areas until the spray has dried unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

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

DO NOT apply TITAN Flumioxazin 500 WG Herbicide under weather conditions (e.g. wind) or from spray equipment that may cause spray to drift onto nearby susceptible crops/plants, cropping lands or pastures. A 15 metre buffer must be observed between sprayed areas and any downwind adjacent vegetation. Care should be taken to avoid damage to adjoining native grasses or grass crops. TITAN Flumioxazin 500 WG Herbicide should not be applied through misting equipment or any other method likely to cause excessive drift.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the product or used containers. DO NOT apply TITAN Flumioxazin 500 WG Herbicide if wind is likely to cause drift onto natural and impounded lakes, waterways, streams or rivers. A 15 metre buffer must be observed between sprayed areas and downwind natural and impounded lakes, dams, waterways, streams or rivers.

### STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool well-ventilated area out of direct sunlight. DO NOT store in or expose product to wet conditions. Rough handling of product may cause breakage of water soluble bags, especially at low temperatures. DO NOT dispose of undiluted chemicals on-site. Break, crush or puncture sachets and containers 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 with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

### **SMALL SPILL MANAGEMENT**

Sweep up material and contain in a refuse vessel for disposal in the same manner as for containers (see Storage and Disposal).

### **SAFETY DIRECTIONS**

Poisonous if absorbed by skin contact or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Open sachets only as needed. When opening the container, preparing spray and using the prepared spray, wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves and face shield. 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 and face shield and contaminated clothing.

### **FIRST AID**

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

WARNING: CONTAINS FLUMIOXAZIN WHICH CAUSES BIRTH DEFECTS IN LABORATORY ANIMALS. WOMEN OF CHILD BEARING AGE SHOULD AVOID CONTACT WITH FLUMIOXAZIN.

### **SAFETY DATA SHEET**

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Flumioxazin 500 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.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: May damage the unborn child. Very toxic to aquatic life with long lasting effects. <a href="Precautionary:">Precautionary:</a> Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF exposed or concerned: Get medical advice/ attention. Collect spillage. Store locked up. Dispose of contents/ container in accordance with national regulations.



