

POISON

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

TITAN

TEBUTHIURON

HERBICIDE

ACTIVE CONSTITUENT: 200g/kg TEBUTHIURON

GROUP **5** HERBICIDE



For control of brigalow regrowth, tea tree regrowth, *Mimosa pigra* and certain problem woody weeds on grazing lands by hand, aerial and ground application as specified in the directions for use table.

APVMA Approval No.: 63629/129468

Pack Size: 10kg; 25kg; 500kg; 1000kg



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 this product to salt or erosion prone areas.

DO NOT apply this product within 100 metres of a recognised water course.

DO NOT apply TITAN Tebuthiuron Herbicide on land with a slope greater than 20 percent (11 degrees).

DO NOT apply TITAN Tebuthiuron Herbicide under conditions which will cause pellet movement to non-target areas during application.

RETAIN at least 20 percent of the original tree population in wildlife corridors that are at least 100 metres wide. These are essential for shade and protection of livestock and native fauna. Ideally, shelter belts should traverse variable terrain, particularly ridgelines and hill tops as well as water courses, and link other vegetated corridors where possible.

FOR LONG TERM VIABILITY retain a minimum of 5 hectares for shade areas, regardless of vegetation type.

DO NOT apply TITAN Tebuthiuron Herbicide on field crops, near desirable trees or shrubs or to areas into which their roots may extend or in locations where the chemical may be washed into contact with their roots as injury or death may occur.

DO NOT apply TITAN Tebuthiuron Herbicide to land to be put under field crops within 5 years of application.

Table 1: Hand Application (NT and WA only)			
See GENERAL INSTRUCTIONS – APPLICATION section for application method details.			
SITUATION	WEEDS CONTROLLED	RATE g/m²	CRITICAL COMMENTS
Tea tree regrowth and associated woody weeds on grazing land	Black Tea Tree	1.5	Estimate the area within 30cm beyond the drip zone of each target weed or group of weeds and calculate the amount of TITAN Tebuthiuron Herbicide to cover area to be treated. Distribute the required dose uniformly within this area. Use the higher rate for heavy density regrowth and heavy clay soils.
	Broadleaf Tea Tree	1	
	Cocky Apple*	2	
	Paperbark Tea Tree, Poplar Gum	1.5	
	Swamp Box	2	
Other woody weeds on grazing land	African Boxthorn		* Some suppression of this species is provided by the rate given.
	Coolibah	1	
	Parkinsonia	1 to 1.5	
	Prickly Acacia, Rubbervine	1.5	
	Whitewood	1	
Giant sensitive tree on grazing land and other grasslands	<i>Mimosa pigra</i>	1	Apply after the onset of storms (to moisten soil, close soil cracks (where applicable) and freshen growth of giant sensitive tree) and before wet season surface flooding. Repeat application may be required in year two for long term control. Some grass suppression may occur.
Table 2: Hand Application (QLD only)			
See GENERAL INSTRUCTIONS – APPLICATION section for application method details.			
SITUATION	WEEDS CONTROLLED	RATE g/m²	CRITICAL COMMENTS
Brigalow regrowth and associated problem woody weeds on grazing land	Belah	1.5	Estimate the area within 30cm beyond the drip zone of each target weed or group of weeds and calculate the amount of TITAN Tebuthiuron Herbicide to cover area to be treated. Distribute the required dose uniformly within this area. Use the higher rate for heavy density regrowth and heavy clay soils. * Some suppression of these species is provided by the rates given.
	Brigalow, Currant Bush	1 to 1.5	
	Dawson Gum	1	
	False Sandalwood*	2	
	Holly Bush	1.5	
	Limebush, Poplar Box, Whitewood, Yellowwood	1	
Tea tree regrowth and associated problem woody weeds on grazing land	Black Tea Tree	1.5	
	Broadleaf Tea Tree	1	
	Cocky Apple	2	
	Paperback Tea Tree, Poplar Gum	1.5	
	Swamp Box	2	
Other woody weeds on grazing land	African Boxthorn	2	
	Silver Leaved Ironbark, Brown Box	1.5	
	Coolibah	1	
	Gidgee	0.5 to 1	
	Gum-topped Box	1.5	
	Groundsel Bush	1	
	Lantana*	2	
	Parkinsonia	1 to 1.5	
	Pink Bloodwood	1	
	Prickly Acacia, Rubbervine, Wild Rosemary	1.5	

Table 3: Hand Application (NSW only)			
See GENERAL INSTRUCTIONS - APPLICATION section for application method details.			
SITUATION	WEEDS CONTROLLED	RATE g/m²	CRITICAL COMMENTS
Brigalow regrowth and associated problem woody weeds on grazing land	Brigalow, Currant Bush, Holly Bush, Limebush, Whitewood	1 to 1.5	Estimate the area within 30cm beyond the drip zone of each target weed or group of weeds and calculate the amount of TITAN Tebuthiuron Herbicide to cover area to be treated.
	False Sandalwood*	2	
Other woody weeds on grazing land	African Boxthorn	0.5	Distribute the required dose uniformly within this area. Use the higher rate for heavy density regrowth and heavy clay soils. * Some suppression of these species is provided by the rates given. ** DO NOT use within 30m of trees. DO NOT apply to single continuous area greater than 0.5 hectares in size.
	Blue Heliotrope**		
	Groundsel Bush	1	
	Lantana*	2	
	Wild Rosemary	1.5	

Table 4: Aerial Application (QLD only)			
See GENERAL INSTRUCTIONS - APPLICATION section for application method details.			
SITUATION	WEEDS CONTROLLED	RATE kg/ha	CRITICAL COMMENTS
Brigalow regrowth and associated problem woody weeds on grazing land	Belah (<i>Casuarina pauper</i>), Brigalow (<i>Acacia harpophylla</i>), Currant Bush (<i>Carissa ovata</i>), Dawson Gum (<i>Eucalyptus cambageana</i>), Limebush (<i>Eremocitrus glauca</i>), Poplar Box (<i>Eucalyptus populnea</i>), Scrub Boonaree (<i>Heterodendrum diversifolium</i>), Whitewood (<i>Atalaya hemiglauca</i>), Wild Rosemary (<i>Cassinia laevis</i>), Yellowwood (<i>Terminalia oblongata</i>)	7.5 to 15	For brigalow areas, a guide to the recommended rates is: 7.5kg for lighter duplex soils, 10kg for medium density re-growth on light clay soils, 12.5kg and above for heavy density re-growth on heavy acidic clays.
	False Sandalwood* (<i>Eremophila mitchellii</i>)	10 to 15	
Tea tree regrowth and associated woody weeds on grazing land	Broadleaf Tea Tree (<i>Melaleuca viridiflora</i>), Paperbark Tea Tree (<i>Melaleuca vervosa</i>)	5 to 7.5	For Tea Tree use the highest rate if the area is prone to waterlogging. Excessive rainfall or waterlogging may reduce control.
	Cocky Apple* (<i>Planchonia careya</i>), Swamp Box (<i>Lophostemon suaveolens</i>)	10	
Other woody weeds on grazing land	Gidgee (<i>Acacia cambagei</i>)	5 to 10	Use the higher rate on dense growth or heavy clay soils.
	Parkinsonia (<i>Parkinsonia aculeata</i>)	10 to 15	
	Prickly Acacia (<i>Acacia nilotica</i>)	7.5 to 10	
	Poplar Gum (<i>Eucalyptus platyphylla</i>)		
	Rubber Vine (<i>Cryptostegia grandiflora</i>)	7.5 to 15	
Eucalypt woodland management using Property Management Planning Principles	Poplar Box (<i>Eucalyptus populnea</i>)	7.5 to 10	Use the higher rate on dense growth or heavier clay soils. To be used in accordance with any "Tree Clearing Guidelines" and 30% intact retention of species as per relevant Vegetation Management Act. Use only for re-growth control, not clearing of Virgin Bush.

Table 5: Aerial Application (NT only)			
See GENERAL INSTRUCTIONS - APPLICATION section for application method details.			
SITUATION	WEEDS CONTROLLED	RATE kg/ha	CRITICAL COMMENTS
Giant sensitive tree on grazing land and other grasslands	Giant Sensitive Tree (<i>Mimosa pigra</i>)	5 to 10	Apply after the onset of storms (to moisten soil, close soil cracks (where applicable) and freshen growth of giant sensitive tree) and before wet season surface flooding. Repeat application may be required in year two for long term control. Some grass suppression may occur.
Other woody weeds on grazing lands	Parkinsonia (<i>Parkinsonia aculeata</i>)	10 to 15	Use the high rate on dense growth or heavy clay soils.
	Prickly Acacia (<i>Acacia nilotica</i>)		
	Poplar Gum (<i>Eucalyptus platyphylla</i>)	7.5 to 10	
	Rubbervine (<i>Cryptostegia grandiflora</i>)	7.5 to 15	

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

FOR NATIVE VEGETATION Use of TITAN Tebuthiuron Herbicide on native vegetation must be done in accordance with STATE and/or LOCAL legislation, including the Vegetation Management Act 2000 in Queensland.

WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.



GENERAL INSTRUCTIONS

TITAN Tebuthiuron Herbicide may be applied at any time of the year. Treatments become effective after sufficient rainfall has occurred to move the chemical into the root zone where it is absorbed by woody plants. Applications just prior to seasonal rainfall give the most rapid response. Herbicidal activity will continue for several seasons after application. During this time woody plants may go through repeated defoliations and regrowths until death occurs. A single application is normally effective for several years. Forage grass production usually increases as woody weed competition is reduced. Increased grass production is also dependent on adequate rainfall and an acceptable grazing management programme. It is important to allow grasses to seed and seedlings to become established after treatment before grazing pressure is increased. Areas treated with TITAN Tebuthiuron Herbicide may be overseeded with suitable pasture species. Consult your agricultural specialist for details on suitable seeding rates, timing and fertiliser application programme. The residual action of TITAN Tebuthiuron Herbicide may be impaired if fire occurs before clay pellets are dissolved and the chemical has moved into the root zone.

HAND APPLICATION

It is recommended that gloves be used during hand application. Apply TITAN Tebuthiuron Herbicide by uniformly distributing by hand over the desired area after weighing out the recommended quantity of pellets. The best way to calibrate yourself is to weigh a normal handful of pellets. If, for example, a handful weighs 20 grams, then this will treat 20 to 40m² at the rate of 0.5 to 1g/m².

DISPENSER PACK

Apply TITAN Tebuthiuron Herbicide by uniformly distributing by hand after dispensing a single dose (7g) from the dispenser unit. Apply the pellets at 1 to 2g per square metre. One dose (7g) will treat 7 to 3.5 square metres at these rates.

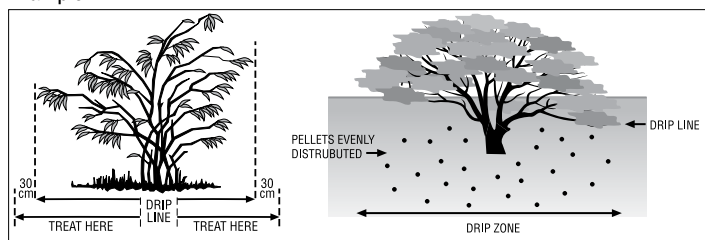
ADDITIONAL INSTRUCTIONS

When applying pellets, distribute them under the tree or regrowth canopy from the root crown or stems to 30cm beyond the drip zone of the plants you want to control. The time required for complete plant death depends on soil type, amount of rainfall, root depth, plant species, plant density and rate of TITAN Tebuthiuron Herbicide used. Some species may go through several defoliations from 6 months to 2 years before dying. Timber and regrowth control with TITAN Tebuthiuron Herbicide pellets may be variable when used on soils with high clay content high organic matter or when treating deep rooted or more tolerant species.

Treatment of individual trees by hand

Estimate the area within 30cm beyond the drip zone, i.e. the area under the plant canopy. It is essential that this area is treated as evenly as possible with pellets being spread from the tree trunk to slightly beyond the drip line formed by the branches. DO NOT throw all the pellets at the base of the tree trunk. This will waste material and could result in poor control.

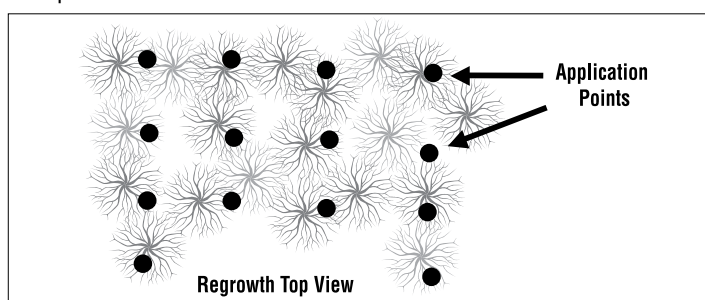
Example:



Treatment of clumps of trees or patches of regrowth by hand

TITAN Tebuthiuron Herbicide pellets are particularly effective in treating areas of regrowth. Estimate the area within 30cm beyond the drip zone and apply the TITAN Tebuthiuron Herbicide pellets on a grid pattern to uniformly cover the area. Pellets should be applied over the top of regrowth if at all possible in an attempt to maintain a good distribution pattern.

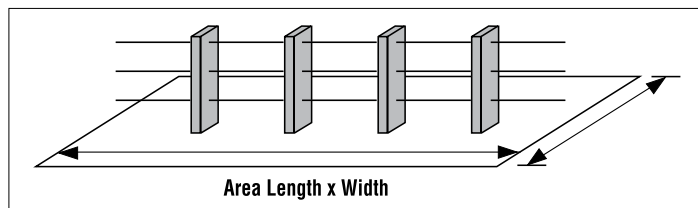
Example:



Treatment of fence lines by hand

Estimate the area to be treated along the fence line and then apply TITAN Tebuthiuron Herbicide pellets on both sides of the fence line as evenly as possible within the area extending 30cm out beyond drip zone.

Example:



AERIAL AND GROUND APPLICATION

Apply TITAN Tebuthiuron Herbicide by uniformly distributing with an approved aircraft or ground driven air equipment, after calibration to achieve the desired application rate.

1. Aerial Application

Aerial application of TITAN Tebuthiuron Herbicide can be carried out by fixed wing aircraft or helicopter fitted with specially designed application apparatus. Use a positive metering device (Meterate) for fixed wing aircraft and Isolair or similar precision equipment for helicopters. A minimum flying height of 20 metres above the canopy of the target plants must be maintained. The swath width is dependent on the type of spreader used. The target area must be correctly marked out and flown with the aid of GPS (Global Positioning System) or markers clearly visible to the operator or a method of marking approved by the manufacturer.

2. Ground Application

Ground application of TITAN Tebuthiuron Herbicide can be carried out in suitable areas by accredited operators.

CLEANING APPLICATION EQUIPMENT

Thoroughly clean all traces of TITAN Tebuthiuron Herbicide from vessels holding pellets e.g. bucket and gloves after use. Residues cleaned from this application equipment should not be emptied on areas where they will contact roots of desirable trees, shrubs or plants.

RESISTANT WEEDS WARNING

TITAN Tebuthiuron Herbicide is a member of the Ureas group of herbicides. The product has inhibitors of photo-synthesis at photosystem II mode of action. For weed resistance management, the product is a Group 5 herbicide. Some naturally-occurring weed biotypes resistant to the product and other Group 5 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 5 herbicides.

GROUP 5 HERBICIDE

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. Contact your farm chemical supplier, consultant, local Department of Agriculture of TITAN AG representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT allow any roots of desirable plants, trees or ornamentals to contact TITAN Tebuthiuron Herbicide. TITAN Tebuthiuron Herbicide may cause temporary herbicidal symptoms to appear on perennial grasses, including buffel grass, particularly after extended dry periods. Higher rates of application of TITAN Tebuthiuron Herbicide (2g/m²) may kill grasses, particularly native annuals. This effect can be minimised by application when grasses are dormant (autumn application). TITAN Tebuthiuron Herbicide may seriously injure desirable forage plants such as pasture legumes and other broadleaf plants. These species may regenerate in subsequent seasons.

PROTECTION OF LIVESTOCK

Poisonous plants may become more palatable after application of granules and stock should be kept away from these plants until they have died down.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

STORAGE AND DISPOSAL

Store in the closed original container in a dry, cool well-ventilated area out of direct sunlight. DO NOT store near food, feedstuffs, fertilisers or seed. DO NOT dispose of granules on-site. Shake bag contents into the spray tank until the bag is empty. Puncture or shred and bury empty bags in an approved waste management facility. If an approved waste management facility is not available, bury the containers below 500mm in a disposal pit specifically

marked out and set up for this purpose clear of waterways, desirable vegetation and tree roots. DO NOT burn empty bags or product.

SPILL AND LEAK MANAGEMENT

Small spills/leaks: Wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves and footwear. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. Report large spills to TITAN AG Pty Ltd at 02 9999 6655.

SAFETY DIRECTIONS

Harmful if swallowed. Will irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container and preparing the product and using the prepared product wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length gloves. Wash hands after use. After each day's use wash gloves and contaminated clothing.

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 Tebuthiuron 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: Toxic to aquatic life with long lasting effects. Precautionary Statements: Avoid release to the environment. Collect spillage. Dispose of contents/ container in accordance with local/regional/national regulations.

