

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

# Thidiazuron 500

Cotton Defoliant

ACTIVE CONSTITUENT: 500g/L THIDIAZURON

For the defoliation of cotton prior to harvest.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR  
USING THIS PRODUCT.

APVMA Approval No.: 60882/0710

Pack Size: 5L, 10L, 20L, 110L,  
200L, 1000L



**TITAN AG Pty Ltd**

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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 when night temperatures fall below 12°C.

DO NOT apply following application of sodium chlorate, magnesium chlorate or diquat.

CROP/SITUATION	DEFOLIATION CONDITIONS	RATE/HA	CRITICAL COMMENTS
Cotton Defoliation – first or second spray (QLD, NSW, WA, NT only)	<b>IDEAL</b> Conditions are hot to warm (30° C to 35° C daytime temperature) and the crop is ready to be defoliated with natural senescence already occurring. Nitrogen and water are almost depleted and there is little or no top growth. A good fruit load is set.	50 to 100mL plus the label rate indicated of D-C-TRON* Cotton Spray Oil	Apply the first spray to cotton, which has been grown under good (non-stressed) conditions and is physiologically mature i.e., when the top harvestable boll is mature. Application made prior to boll maturity may result in yield and quality reductions. • Use the lower rates of 50 to 75mL/ha only under warm early season conditions. • Use the higher rate for denser canopies or to provide a faster response. • A second spray 7 to 10 days later of either this product or an alternative harvest aid may be required.
	<b>GOOD</b> Conditions are warm (25° C to 30° C daytime temperatures) and the crop is ready to be defoliated. Nitrogen and water are low and there is little or no new growth and a good fruit load is set.	100 to 150mL plus the label rate indicated of D-C-TRON Cotton Spray Oil	Apply as above but use these rates under good conditions.
	<b>AVERAGE</b> Conditions are: (i) Warm but night temperatures are dropping to 12 °C (not below) and the crop is physiologically ready to defoliate or; (ii) Temperature is still hot/warm but the crop is not physiologically ready to senesce.	150 to 200mL plus the label rate indicated of D-C-TRON Cotton Spray Oil	Apply as above but use these rates under average conditions.
	<b>COLD</b> Night temperatures fall below 12°C and/or mean day/night temperatures fall below 18°C.	–	DO NOT apply under cold conditions.

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.****WITHHOLDING PERIODS:****COTTON HARVESTING:** NOT REQUIRED WHEN USED AS DIRECTED.**GRAZING/COTTON TRASH:** DO NOT GRAZE TREATED AREAS OR FEED COTTON TRASH TO LIVESTOCK.

## GENERAL INSTRUCTIONS

TITAN Thidiazuron 500 Cotton Defoliant is an odourless, non-corrosive defoliant/harvest aid. After treatment, leaves fall while still green so that there is minimal dry leaf trash to contaminate fibre or interfere with harvesting. Maximum defoliation occurs 7 to 21 days following application. Good control of regrowth is seen when TITAN Thidiazuron 500 Cotton Defoliant is used at rates over 100mL/ha. Defoliation will be slower under average conditions, or when the crop is not physiologically mature.

**Note:** Rainfall within 24 hours after application will reduce the effectiveness of TITAN Thidiazuron 500 Cotton Defoliant. Re-treatment may be necessary. Defoliation of crops with moderate to high levels of nitrogen remaining in the soil are more prone to leaf freezing than crops that have depleted soil nitrogen. Tank mixes of TITAN Thidiazuron 500 Cotton Defoliant with organophosphates may form a residue in application equipment. While still fresh and moist, this residue is easily removed by flushing the entire system with a commercial tank cleaner.

DO NOT allow the spray solution to dry in the application equipment. Immediately following application, flush and rinse equipment (mix tanks, pumps, transfer lines, application tanks, sumps, booms, nozzles and all related equipment) thoroughly with detergent and water.

Should any residue of TITAN Thidiazuron 500 Cotton Defoliant remain in the sprayer system, it may be released during subsequent applications of other products causing damage to crops.

## Export of Treated Produce

Growers should note that suitable MRL's or import tolerances may not be established in all markets for product treated with TITAN Thidiazuron 500 Cotton Defoliant. If you are growing product for export, please check with TITAN AG Pty Ltd for the latest information on MRL's and import tolerances BEFORE using TITAN Thidiazuron 500 Cotton Defoliant .

## MIXING

Add the required amount of TITAN Thidiazuron 500 Cotton Defoliant straight into the partly filled spray tank or mixing vat with agitator running, followed by D-C-TRON Cotton Spray Oil, then add the rest of the water. Keep mixture agitated while spraying. Use only freshly prepared sprays.

DO NOT store spray mixture overnight.

When tank mixing with emulsifiable concentrates (EC) add the TITAN Thidiazuron 500 Cotton Defoliant to the 3/4 filled spray tank or mixing vat and agitate thoroughly. With agitator running, then add the EC product, followed by the D-C-TRON Cotton Spray Oil. Keep mixture agitated while spraying.

## APPLICATION

Apply as a uniform spray ensuring thorough coverage of the whole plant.

## EQUIPMENT

**Aircraft:** Apply by aircraft in 20 to 40 L/ha spray mixture and ensure thorough coverage. A steady crosswind is recommended for best penetration. DO NOT exaggerate swath width.

## GROUND SPRAYS

Standard boom sprays are recommended and must be fitted with mechanical or by-pass agitation. Use sufficient water to obtain complete coverage of all leaves, i.e. at least 90 to 100 litres of water per hectare. Good coverage should be obtained with 3 or more nozzles per row depending upon crop height and canopy density. A nozzle configuration including droppers will give maximum coverage in dryland crops with particular care being taken to ensure thorough but even coverage. Overdosing on some plant parts, e.g., nozzle overlap along the sides of plants may cause localised leaf freezing. If band spraying dryland crops, care should be taken when calculating the actual applied rate of TITAN Thidiazuron 500 Cotton Defoliant per sprayed hectare.

## COMPATIBILITY

TITAN Thidiazuron 500 Cotton Defoliant is compatible in tank mixtures with ethephon, dimethoate and parathion.

**Caution:** When tank mixed with glyphosate, a higher proportion of cotton leaf may be retained (freezing).

DO NOT use this mixture on stressed cotton, particularly drought-affected cotton.

## PRECAUTIONS

DO NOT use human flagging unless flaggers are protected by engineering controls such as vehicles with cabs.

## RE-ENTRY PERIODS

DO NOT allow entry into treated areas until spray has dried. When prior entry is necessary, wear 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 allow spray drift to contact trees or crops other than cotton, as this product may injure or defoliate other crops, particularly citrus, grapevines and lettuce. To help reduce drift damage potential:

- DO NOT apply TITAN Thidiazuron 500 Cotton Defoliant by air when citrus in flush is within 8 km downwind from the point of application.
- DO NOT apply TITAN Thidiazuron 500 Cotton Defoliant by air when within 800m of lettuce.

In addition:

- DO NOT plant lettuce or carrots in cotton fields where TITAN Thidiazuron 500 Cotton Defoliant has been applied within the previous 9 months.
- DO NOT plant legumes, lucernes, other root crops or leafy vegetables (besides those noted above) in cotton fields where TITAN Thidiazuron 500 Cotton Defoliant has been applied within the previous two months.
- DO NOT plant small grains, sorghum or corn in cotton fields where TITAN Thidiazuron 500 Cotton Defoliant has been applied within the previous two weeks.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

## STORAGE AND DISPOSAL

KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a dry, cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.

**5L, 10L, 20L, 200L:** Triple or preferably pressure 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 bury empty containers in 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.

**110L:** Store in the original sealed Enviro drum in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the drum with water or any water or any other foreign matter. After each use of the product, please ensure the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the drum have been used, please return the empty drum to the point of purchase. The drums remain the property of TITAN AG Pty Ltd.

**1000L:** Store in the closed original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs TITAN AG Pty Ltd should be notified immediately. This minibulk/bulk container is reusable and remains the property of TITAN AG Pty Ltd. DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty return to TITAN AG Pty Ltd for cleaning, relabelling and refilling.

## SAFETY DIRECTIONS

May irritate the eyes. Avoid contact with eyes. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow length PVC gloves. After each day's use, wash gloves and contaminated clothing. Wash hands after use.

## FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

## SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Thidiazuron 500 Cotton Defoliant is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit [www.titanag.com.au](http://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: 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.

