## CAUTION

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

### TITAN

# CLETHODIM 360 HERBICIDE

ACTIVE CONSTITUENT: 360g/L CLETHODIM SOLVENT: 570g/L LIQUID HYDROCARBON

For the control of certain grass weeds in beetroot, cabbage, canola, celery, chickpeas, cotton, faba beans, field peas, forestry, lentils, lettuce, lupins, lettuce, mung beans, non-bearing fruit trees, onions, ornamentals, peanuts, potatoes and soybeans as per the Directions for Use table. APVMA Approval No.: 82380/131509

Pack Size: 5L, 20L, 100L, 110L, 200L, 1000L



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GROUP

HERBICIDE



UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID (Clethodim) PG: III Hazchem: •3Z

#### **DIRECTIONS FOR USE**

#### **Restraints:**

DO NOT apply without the addition of an adjuvant. DO NOT apply to plants that are stressed by moisture or temperature extremes. DO NOT apply if rain is expected within a one hour of application. DO NOT apply TITAN Clethodim 360 Herbicide more than once to any one crop.

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	RATE mL/ha	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
Canola, Pulse Crops (including Azuki Beans, Broad Beans, Chickpeas, Faba Beans, Field Peas, Lentils <sup>+</sup> , Lupins <sup>#</sup> ) Pasture Legume (Lucerne, Clover and Medic) Seed Crops and Pastures <sup>1</sup> (including pastures containing Chicory and Plantain)	Canola: DO NOT APPLY after flower buds become visible (green buds) Azuki Beans: DO NOT APPLY after first flower buds are visible Chickpeas: DO NOT APPLY beyond full flowering Faba Beans: DO NOT APPLY beyond full flowering Field Peas: DO NOT APPLY beyond full flowering	Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> )	100 to 330	2 leaf to fully tillered	QLD, NSW, ACT, VIC, TAS, WA only	Always apply with D-C-Trate* at 2L/100L or Hasten* at 1L/100L or Kwickin* at 1L/100L or Uptake* at 500mL/100L spray volume.
		Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus diandrus</i> ), Wild Oats ( <i>Avena</i> spp.)	115 to 330			The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress. See COMPATIBILITY and CAUTIONS in GENERAL INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides. * Application up to 7 – node/early branching crop growth stage only. # NOT QLD 1 See use of TITAN Clethodim 360 in pastures under General Instructions.
		Volunteer Wheat ( <i>Triticum aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> )	130* to 330* (115 to 330 in WA only)			
		Volunteer Barley ( <i>Hordeum vulgare</i> )	330			
		Silver Grass ( <i>Vulpia bromoides</i> ) – suppression only	165 to 330		NSW, ACT, VIC, TAS only	
	Lentils: Apply up to the 7 node/early branching stage of crop growth	Paradoxa Grass ( <i>Phalaris paradoxa</i> )	165 to 250	2 to 5 leaf stage	QLD, NSW, ACT	
			250 to 330	5 leaf to fully tillered		
	Lupins: DO NOT APPLY after 80% of flowers have opened					
Cotton (QLD, NSW and NT only), Peanuts, Mung Beans, Soybeans Pasture Legume (Lucerne, Clover and Medic) Seed Crops and Pastures <sup>1</sup> (including pastures containing Chicory and Plantain)	Cotton: DO NOT APPLY after full flowering (mid bloom) Peanuts: DO NOT APPLY after the pod fill stage of crop development Mung beans: DO NOT APPLY after first flower buds are visible Soybeans: DO NOT APPLY after first flowers are visible	Barnyard Grass ( <i>Echinochloa</i> spp.), Blown Grass ( <i>Agrostis aveacea</i> ), Crowsfoot Grass ( <i>Eleusine indica</i> ), Feathertop Rhodes Grass ( <i>Chloris virgata</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> ), Red Sprangletop Grass ( <i>Leptochloa filiformis</i> ), Seedling Johnson Grass <sup>2</sup> ( <i>Sorghum halepense</i> ), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.)	165 to 250	2 to 5 leaf stage	QLD, NSW, ACT, VIC, WA, NT only	Always apply with D-C-Trate at 2L/100L or Hasten at 1L/100L or Kwickin at 1L/100L or Uptake at 500mL/100L spray volume.
			250 to 330	5 leaf to fully tillered		
						The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress.
						See COMPATIBILITY and CAUTIONS in GENERAL INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides.
						1 See use of TITAN Clethodim 360 in pastures under General Instructions.
						2 Only Johnson Grass seedlings germinating from seed will be controlled. Seedlings that appear later as shoots from underground stems will not be controlled, and more than one application may be required to control emerging shoots.



CROP	WEEDS CONTROLLED	RATE mL/ha	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
Beetroot, Cabbage, Celery, Lettuce, Potatoes, Onions	Barnyard Grass ( <i>Echinochloa</i> spp.), Blown Grass ( <i>Agrostis aveacea</i> ), Crowsfoot Grass ( <i>Eleusine indica</i> ), Feathertop Rhodes Grass ( <i>Chloris virgata</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> ), Paradoxa Grass ( <i>Phalaris paradoxa</i> ), Red Sprangletop Grass ( <i>Leptochloa filiformis</i> ), Seedling Johnson Grass' ( <i>Sorghum halepense</i> ), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.)	165 to 250 250 to 330	2 to 5 leaf stage 5 leaf to fully tillered	QLD, NSW, ACT, VIC, WA, NT only	Always apply with D-C-Trate at 2L/100L or Hasten at 1L/100L or Kwickin at 1L/100L or Uptake at 500mL/100L spray volume. The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress. See COMPATIBILITY and CAUTIONS in GENERAL INSTRUCTIONS for mixture recommendations with insecticides, fungicides and other herbicides. 1 See use of TITAN Clethodim 360 in pastures under General Instructions. 2 Only Johnson Grass seedlings germinating from seed will be controlled. Seedlings that appear later as shoots from underground stems will not be controlled, and more than one application may be required to control emerging shoots.
	Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> )	100 to 330	2 leaf to fully tillered	ALL STATES	Always apply with D-C-Trate at 2L/100L or Hasten at 1L/100L or Kwickin at 1L/100L or Uptake at 500mL/100L spray volume. The lower doses will provide effective control if applied under ideal conditions to weeds that are smaller, actively growing and free from temperature or water stress.
	Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus diandrus</i> ), Wild Oats ( <i>Avena</i> spp.)	115 to 330			
	Volunteer Wheat ( <i>Triticum aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> )	130* to 330* (115 to 330 in WA only)			
	Volunteer Barley ( <i>Hordeum vulgare</i> )	330			Use a spray volume of 150L/ha when spraying dense grass populations.
	Silver grass ( <i>Vulpia bromoides</i> ) – suppression only (not QLD, WA)	165 to 330			
	Winter Grass ( <i>Poa annua</i> )	330			
Forestry, non-bearing fruit trees and ornamentals	Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> ), Barley Grass ( <i>Hordeum leporinum</i> ), Barnyard Grass ( <i>Echinochloa</i> spp.), Blown Grass ( <i>Agrostis aveacea</i> ), Brome Grass ( <i>Bromus diandrus</i> ), Crowsfoot Grass ( <i>Eleusine indica</i> ), Feathertop Rhodes Grass ( <i>Chloris virgata</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> ), Paradoxa Grass ( <i>Phalaris paradoxa</i> ), Red Sprangletop Grass ( <i>Leptochloa filiformis</i> ), Seedling Johnson Grass <sup>1</sup> ( <i>Sorghum halepense</i> ), Silver Graps ( <i>Mulais bramaida</i> )	330	2 leaf to fully tillered	ALL STATES	Apply after plants have recovered from transplant shock and are showing signs of active growth. Always apply with D-C- Trate at 2L/100L or Hasten at 1L/100L or Kwickin at 1L/100L or Uptake at 500mL/100L spray volume. Use a spray volume of 150L/ha when spraying dense grass populations. D0 NOT use on Gymnosperms (pines, conifers, etc) unless a prior test has been conducted to check safety on the relevant species.
	Silver Grass ( <i>Vulpia bromoides</i> ) – suppression only (not QLD, WA), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Barley ( <i>Hordeum vulgare</i> ), Volunteer Oats ( <i>Avena sativa</i> ),				See COMPATIBILITY and CAUTIONS in GENERAL INSTRUCTIONS for particular species. 1 Only Johnson Grass seedlings
	Volunteer Oats ( <i>Vena Salva</i> ), Volunteer Sorghum ( <i>Sorghum</i> spp.), Volunteer Wheat ( <i>Triticum aestivum</i> ), Winter Grass ( <i>Poa annua</i> )				germinating from seed will be controlled. Seedlings that appear later as shoots from underground stems will not be controlled, and more than one application may be required to control emerging shoots.

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



#### WITHHOLDING PERIODS: HARVEST:

PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC) SEED CROPS AND PASTURES: NOT REQUIRED WHEN USED AS DIRECTED.

PASTURES: NOT REQUIRED WHEN USED AS DIRECTED. CANOLA, COTTON, PEANUTS, PULSES (AZUKI BEANS, BROAD BEANS, CHICKPEAS, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, MUNG BEANS) AND SOYBEANS: NOT REQUIRED WHEN USED AS DIRECTED. FORESTRY: NOT REQUIRED WHEN USED AS DIRECTED. BEFTROOT, CARRAGE: DO NOT APPLY LATER THAN 7 DAYS BEFORE

BEETROOT, CABBAGE: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.

ONIONS: DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST. LETTUCE, POTATOES: DO NOT APPLY LATER THAN 4 WEEKS BEFORE HARVEST.

CELERY: DO NOT APPLY LATER THAN 9 WEEKS BEFORE HARVEST. Grazing:

PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC) SEED CROPS AND PASTURES: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 14 DAYS AFTER APPLICATION.

CANOLA, PEANUTS, PULSES (AZUKI BEANS, BROAD BEANS, CHICKPEAS, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, MUNG BEANS) AND SOYBEANS: DO NOT GRAZE OR CUT FOR STOCK FEED FOR 21 DAYS AFTER

APPLICATION.

COTTON: DO NOT GRAZE OR CUT COTTON FORAGE OR STUBBLE FOR STOCK FEED.

#### **GENERAL INSTRUCTIONS**

#### **CLEANING SPRAY EQUIPMENT**

Before using TITAN Clethodim 360 ensure that the recommended clean-out procedures for the previous product (particularly sulfonylurea herbicides) sprayed with the equipment was done properly.

After using TITAN Clethodim 360 empty the tank and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean filters in the tank, pump line and nozzles. Use of a household detergent will aid in the cleaning the equipment. Add detergent to the part-filled spray tank and thoroughly circulate through pumps, hoses and nozzles. Drain the system and thoroughly rinse twice with clean water. Rinse water should be discharged onto a designated disposal area, or if this is unavailable, onto unused land away from desirable plants and water sources.

#### MIXING

To ensure even mixing, half-fill the spray tank with clean water, add the required amount of TITAN Clethodim 360 Herbicide. Add spray additive and agitate thoroughly, then add the remainder of the water. Agitate again before spraying commences.

#### APPLICATION

**Ground Application:** TITAN Clethodim 360 Herbicide should be applied with calibrated spray equipment. DO NOT apply with spray droplets smaller than a MEDIUM spray droplet size category according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline. Apply in a minimum of 50 litres of water per hectare. Use 150L/ha when spraying dense populations.

**Aerial Application:** TITAN Clethodim 360 Herbicide can be applied through aircraft fitted with boom or Micronair equipment. DO NOT apply with spray droplets smaller than a MEDIUM spray droplet size category. A spray volume of 20 to 30L/ha is recommended. Best results will be obtained when aerial applications are made in a light crosswind. Applications should not be made during temperature inversions or in conditions of very low relative humidity. Care should be taken to avoid drift damage to adjoining grass crops.

#### COMPATIBILITY

#### **Grass Herbicides**

TITAN Clethodim 360 Herbicide is compatible with the following grass herbicides: Targa\*, Fusilade\*, Verdict\*, Sertin\* and Correct\* (refer to the Bayer Correct label for detail on adjuvant recommendations for that product).

**Note:** In all situations where TITAN Clethodim 360 Herbicide is mixed with another grass herbicide, TITAN Clethodim 360 Herbicide should be used at the full label rate specified for the target weed species.

#### Insecticides

TITAN Clethodim 360 Herbicide may be applied in tank mixtures with the following products: alpha-cypermethrin and omethoate. TITAN Clethodim 360 Herbicide should not be applied in tank mixtures with diflufenican, bentazone or acifluorfen. Apply as separate applications. For information on compatibility of products not listed, please refer to TITAN AG Ptd Ltd.

#### **RESISTANT WEEDS WARNING**

TITAN Clethodim 360 Herbicide is a member of the cyclohexanedione group of herbicides. TITAN



Clethodim 360 Herbicide has the inhibition of acetyl CoA carboxylase mode of action. For weed resistance management, TITAN Clethodim 360 Herbicide is a Group 1 herbicide. Some naturally occurring weed biotypes resistant to TITAN Clethodim 360 Herbicide and other Group 1 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 Clethodim 360 Herbicide or other Group 1 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 Clethodim 360 Herbicide to control resistant weeds.

#### CAUTION

**Ornamentals and Trees** – While TITAN Clethodim 360 Herbicide is generally selective to broadleaf plants (i.e. it is active against grasses), tests should always be made on a small number of plants not previously tested. D0 NOT use on Gymnosperms (pines, conifers etc.) unless a prior test has been conducted to check safety on the relevant species.

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

DO NOT apply TITAN Clethodim 360 Herbicide if wind is likely to cause drift onto susceptible crops/plants, cropping lands or pastures. TITAN Clethodim 360 Herbicide should not be applied through misting equipment or any other method likely to cause excessive drift. Care should be taken to avoid damage to adjoining native grasses or grass crops.

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

D0 N0T contaminate streams, rivers or waterways with the chemical or used containers.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. D0 NOT store for prolonged periods in direct sunlight. Protect from frost. Triple rinse containers before disposal. Add rinsings to spray tank. D0 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, puncture or shred and deliver empty packaging for appropriate disposal 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. D0 N0T burn empty containers or product.

**Refillable containers:** Store in the closed, original container in a cool, wellventilated area. DO NOT store for prolonged periods in direct sunlight. Empty containers fully into application equipment. Close all valves and return to point of supply for refill or storage.

#### SAFETY DIRECTIONS

Harmful if swallowed. Will irritate the eyes and skin. When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow length chemical resistant gloves and face shield or goggles. If product on skin immediately wash area with soap and water. If product in eyes, wash it out immediately with water. 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 or goggles and contaminated clothing.

#### FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766. If swallowed, do not induce vomiting. If in eyes wash out immediately with water.

#### SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Clethodim 360 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: Combustible liquid. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects. <u>Precautionary Statements:</u> Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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/protective clothing/eye protection/face protection/ hearing protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Specific treatment (see on this label). Do NOT induce vomiting. 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. In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish. Store in a well-ventilated place. Store locked up. Dispose of contents/container in accordance with local/regional/national regulations.





