

# CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

# Clethodim 240

## Herbicide

ACTIVE CONSTITUENT: 240g/L CLETHODIM

SOLVENT: 630g/L LIQUID HYDROCARBONS

GROUP **A** HERBICIDE

For the control of certain grass weeds in beetroot, cabbage, canola, celery, cotton, forestry, lettuce, non-bearing fruit trees, onions, ornamentals, peanuts, pulses (including adzuki beans, broad beans, chickpeas, faba beans, field peas, lentils, lupins and mung beans), potatoes, soybeans and pasture legume (lucerne, clover and medic), seed crops (and pastures) according to the Directions for Use table.

**IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.**

APVMA Approval No.: 62806/100722

Contents: 5L-20L; 60L-110L; 1000L



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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 without the addition of an oil (see GENERAL INSTRUCTIONS).  
DO NOT apply to plants that are stressed by moisture or temperature extremes.  
DO NOT apply if rain is expected within one hour of application.  
DO NOT apply more than once to any one crop.

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	RATE (mL/ha)	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
<b>Canola</b>	DO NOT apply after flower buds become visible (green buds).	Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> )	150 to 500	2-leaf to fully tillered	QLD, NSW, ACT, VIC, TAS, SA, WA only	Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.  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.
		Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus diandrus</i> ), Wild Oats ( <i>Avena</i> spp.)	175 to 500			
		Volunteer Wheat ( <i>Triticum aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> )	200 to 500 (175 to 500 in WA only)			
		Silver Grass ( <i>Vulpia bromoides</i> ) suppression only	250 to 500			
		Paradoxa Grass ( <i>Phalaris paradoxa</i> )	250 to 375			
			375-500	5-leaf to fully tillered	NSW, ACT, VIC, TAS only	
<b>Pulse crops</b> (including adzuki beans, broad beans, chickpeas, faba beans, field peas, lentils <sup>^</sup> and lupins <sup>#</sup> ).  <b>Pasture legume</b> (lucerne, clover and medic) <b>seed crops and pastures</b> <sup>1</sup> (including pastures containing chicory and plantain).	<b>Adzuki beans:</b> DO NOT APPLY after first flower buds are visible.  <b>Chickpeas, faba beans, broad beans, field peas:</b> DO NOT APPLY beyond full flowering.  <b>Lentils:</b> Apply up to the 7 node/early branching stage of crop growth.  <b>Lupins:</b> DO NOT APPLY after 80% of flowers have opened.	Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> )	150 to 500	2-leaf to fully tillered	QLD, NSW, ACT, VIC, TAS, SA, WA only	Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.  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.  <sup>^</sup> Application up to 7-node/early branching crop growth stage only.  <sup>#</sup> NOT QLD  <sup>1</sup> See use of TITAN Clethodim 240 Herbicide in pastures under General Instructions.
		Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus diandrus</i> ), Wild Oats ( <i>Avena</i> spp.)	175 to 500			
		Volunteer Wheat ( <i>Triticum aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> )	200 to 500 (175 to 500 in WA only)			
		Volunteer Barley ( <i>Hordeum vulgare</i> )	500			
		Silver Grass ( <i>Vulpia bromoides</i> ) suppression only	250 to 500			
		Paradoxa Grass ( <i>Phalaris paradoxa</i> )	250 to 375			
			375-500			
		5-leaf to fully tillered	NSW, ACT, VIC, TAS only			
<b>Cotton</b> (Qld, NSW and NT only)  <b>Peanuts, Mung beans, Soybeans</b>  <b>Pasture legume</b> (lucerne, clover and medic) <b>seed crops and pastures</b> <sup>1</sup> (including pastures containing chicory and plantain).	<b>Cotton:</b> DO NOT APPLY after full flowering (mid bloom).  <b>Peanuts:</b> DO NOT APPLY after the pod fill stage of crop development.  <b>Mung beans, soybeans:</b> DO NOT APPLY after first flower buds are visible.	Barnyard Grass ( <i>Echinochloa</i> spp.), Blown Grass ( <i>Agrostis aveacea</i> ), Crownsfoot 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 ( <i>Sorghum halepense</i> ), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.)	250 to 375	2- to 5-leaf stage	QLD, NSW, ACT, VIC, WA, NT only	Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.  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.  <sup>1</sup> See use of TITAN Clethodim 240 Herbicide in pastures under General Instructions.  <sup>2</sup> 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.  Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.
			375-500			



CROP	WEEDS CONTROLLED	RATE (mL/ha)	STAGE OF WEED GROWTH	STATE	CRITICAL COMMENTS
<b>Beetroot, Cabbage, Celery, Lettuce, Potatoes, Onions</b>	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 filliformis</i> ), Seedling Johnson Grass <sup>1</sup> ( <i>Sorghum halepense</i> ), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.)	250 to 375  375-500	2- to 5-leaf stage  5-leaf to fully tillered	ALL STATES	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.  Use a spray volume of 150L/ha when spraying dense grass populations.  <sup>1</sup> 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.  Always apply with a crop oil. See Adjuvants and Spray Additives for specific instructions.
	Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris minor</i> ), Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus diandrus</i> ), Wild Oats ( <i>Avena</i> spp.)	150 to 500  175 to 500	2-leaf to fully tillered		
	Volunteer Wheat ( <i>Triticum aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> )	200 to 500 (175 to 500 in WA only)			
	Volunteer Barley ( <i>Hordeum vulgare</i> )	500			
	Silver Grass ( <i>Vulpia bromoides</i> ) – suppression only (not QLD, WA)	250 to 500			
	Winter Grass ( <i>Poa annua</i> )	500			
	<b>Forestry, non-bearing fruit trees and ornamentals</b>	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 filliformis</i> ), Seedling Johnson Grass <sup>1</sup> ( <i>Sorghum halepense</i> ), Silver Grass ( <i>Vulpia bromoides</i> ) – suppression only (not QLD, WA), Summer Grass ( <i>Digitaria</i> spp.), Volunteer Sorghum ( <i>Sorghum</i> spp.), Volunteer Wheat ( <i>Triticum aestivum</i> ), Volunteer Oats ( <i>Avena sativa</i> ), Volunteer Barley ( <i>Hordeum vulgare</i> ), Winter Grass ( <i>Poa annua</i> )	500		

**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.**

**CANOLA, COTTON, PEANUTS, PULSES (ADZUKI BEANS, BROAD BEANS, CHICKPEAS, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, AND MUNG BEANS)**

**AND SOYBEANS: NOT REQUIRED WHEN USED AS DIRECTED.**

**FORESTRY: NOT REQUIRED WHEN USED AS DIRECTED.**

**BETROOT, 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 (ADZUKI BEANS, BROAD BEANS, CHICKPEAS, FABA BEANS, FIELD PEAS, LENTILS, LUPINS, AND 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

### RESISTANT WEEDS WARNING

TITAN Clethodim 240 Herbicide is a member of the cyclohexanedione group of herbicides. TITAN Clethodim 240 Herbicide has the inhibition of acetyl coA carboxylase mode of action. For weed resistance management, TITAN Clethodim 240 Herbicide is a Group A Herbicide. Some naturally-occurring weed biotypes resistant to TITAN Clethodim 240 Herbicide and other Group A 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 240 Herbicide or other Group A 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 240 Herbicide to control resistant weeds.

### CLEANING SPRAY EQUIPMENT

**Before using TITAN Clethodim 240 Herbicide:** Ensure that the recommended clean-out procedure for the previous product (particularly sulfonyleurea herbicides) sprayed with the equipment was done properly.

**After using TITAN Clethodim 240 Herbicide:** Empty the tank and drain the whole system. Thoroughly wash inside the tank using a pressure hose, drain the tank and clean all filters in the tank, pump line and nozzles. Use of a household detergent will aid in 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 and add the required amount of product. Add spray additive and agitate thoroughly, then add the remainder of the water. Agitate again before spraying commences.

### ADJUVANTS AND SPRAY ADDITIVES

Always apply TITAN Clethodim 240 Herbicide with a crop oil.

TITAN Clethodim 240 Herbicide may be applied with Hasten\*, Kwickin\*, Activoil\*, D-C-Trate Advance or Rocket\* at 1L/100L water or with Uptake\* or Enhance\* at 0.5-1L/100L water. (Use the higher rate of oil when weeds are large or if spraying conditions are less than optimal.) TITAN Clethodim 240 Herbicide may also be applied with D-C-Trate\* at 2L/100L water.

TITAN Clethodim 240 Herbicide is compatible with ammonium sulphate products such as Spraymate\* Liase. When mixing TITAN Clethodim 240 Herbicide with atrazine use Uptake or Enhance at 1L/100L as the adjuvant. The addition of ammonium sulphate is recommended to improve performance of this tank mix.

TITAN Clethodim 240 Herbicide is not compatible with Hot-Up\* Spray Adjuvant or Freeway\* Gold Penetrant.

### APPLICATION

**Ground Application:** TITAN Clethodim 240 Herbicide should be applied with calibrated spray equipment producing a median droplet range of 200 to 300 microns VMD. Apply in a minimum of 50 litres of water per hectare. Use 150L/ha when spraying dense populations.

**Aerial Application:** TITAN Clethodim 240 Herbicide can be applied through aircraft fitted with boom or Micronair equipment. A spray volume of 20 to 30L/ha is recommended and equipment should be adjusted to deliver droplets in the range of 200 to 250 microns VMD. 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.

### USE OF TITAN CLETHODIM 240 ON PASTURE LEGUME (LUCERNE, CLOVER AND MEDIC) SEED CROPS AND PASTURES AND PASTURE HERBS

TITAN Clethodim 240 Herbicide has been demonstrated to be safe when applied to the following cultivars during early establishment.

#### Pasture legumes

##### Clover (*Trifolium spp.*)

**Annual:** Subterranean Clover (*Dalkeith, Dalsa, Goulburn, Koala, Nungarrin, Riverina, Seaton Park and York A*), Arrowleaf Clover (*Zulu II*), Balansa Clover (*Enduromax, Frontier, Paradana*), Berseem Clover (*Elite II*), Gland Clover (*Prima*), Persian Clover (*Prolific, Leeton*), Rose Clover (*Hykon*).

**Perennial:** Strawberry Clover (*Palestine*), Whiteclover (*NuSira*).

##### Lucerne and Medics (*Medicago spp.*)

Lucerne (*Aurora, Field, Genesis, Hunterfield, Multileaf, Salado, Sardi SEVEN, Sceptre and Venus*), Barrel Medic (*Sephi, Jester Paraggio, Caliph*), Burr Medic (*Scimitar, Santiago*), Snail Medic (*Silver*).

##### Serradella (*Ornithopus spp.*)

French or Pink Serradella (*Cadiz*), Yellow Serradella (*Charano, Santorini*).

##### Pasture herbs:

Chicory (*Puna II*) and Plantain (*Tonic*)

Apply TITAN Clethodim 240 Herbicide when plants have reached 2-4 trifoliate leaf stage, or after 40 days from sowing. Some pasture varieties may exhibit an initial reduction in crop vigour or biomass, however, these symptoms are transient and crops recover fully with no effect on yield.

## COMPATIBILITY

TITAN Clethodim 240 Herbicide is compatible with the following grass herbicides: Targa\*, Fusilade\*, Verdict\*, Sertin\* and Correct\*. (Refer to the Correct label for detail on adjuvant recommendations for that product).

**Note:** In all situations where TITAN Clethodim 240 Herbicide is mixed with another grass herbicide, TITAN Clethodim 240 Herbicide should be used at the full label rate specified for the target weed species.

TITAN Clethodim 240 Herbicide may also be applied in tank mixtures with one of the following products: Fastac\* 100, Le-Mat\*, Lontrel\*, Spin Flo\*, Sumi-Alpha\* Flex\*, Sumisclax\* Broadacre and Dithane\* M45.

TITAN Clethodim 240 Herbicide is compatible with atrazine. Avoid using this tank mix when crops are stressed by environmental factors. When mixing TITAN Clethodim 240 Herbicide with atrazine use Uptake\* or Enhance\* at 1L/100L as the adjuvant. The addition of an ammonium sulphate product such as Spraymate\* Liase is recommended to improve performance of this tank mix.

TITAN Clethodim 240 Herbicide should not be applied in a tank mix with Bravo\* (chlorothalonil), Brodal\* (diflufenican), Basagran\* (bentazone and MCPA) or Blazer\* (acifluorfen). Apply as separate applications. For information on compatibility of products not listed, please refer to TITAN AG Pty Ltd.

## CAUTION

**Ornamentals and Trees** – While TITAN Clethodim 240 Herbicide is generally selective to broadleaved plants (i.e. it is active against grasses), tests should always be made on a small number of plants not previously tested.

DO 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 240 Herbicide if wind is likely to cause drift onto susceptible crops/plants, cropping lands or pastures. TITAN Clethodim 240 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

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

## STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool well-ventilated area out of direct sunlight. Protect from frost. Triple 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 deliver empty packaging to an approved waste management facility. If an approved waste management authority is not available, bury the empty packaging 500mm 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.

**For Refillable containers:** Empty contents 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 PVC gloves and face shield or goggles. 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, face shield or goggles and contaminated clothing.

## FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766.

If swallowed, do NOT induce vomiting. Give a glass of water.

## MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Clethodim 240 Herbicide 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.

\* Other trademarks

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