

CAUTION

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

TITAN

Clopyralid 300

Herbicide

ACTIVE CONSTITUENT: 300g/L CLOPYRALID
present as the TRIISOPROPANOLAMINE SALT

GROUP I HERBICIDE

For the control of a wide range of broadleaf weeds in wheat, barley, triticale, oats, pastures, canola, fallow land, forests and industrial situations as specified in the Directions for Use table.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR
USING THIS PRODUCT.

APVMA Approval No.: 62485/0510

Pack Sizes: 5L, 10L, 20L, 110L



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

It is essential to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

RESTRAINTS:

DO NOT apply to weeds which may be stressed (not actively growing) due to prolonged periods of extreme heat or cold, moisture stress (water-logged or drought affected) or previous herbicide treatment as reduced levels of control may result.

DO NOT sow susceptible crops (see PROTECTION OF CROPS) for nine months following an application up to 300mL/ha or for twelve months following an application in excess of 300mL/ha and up to 500mL/ha.

Field peas should not be sown the season following an application of 500mL/ha. Where rates in excess of 500mL/ha have been used, susceptible crops including field peas should not be sown for at least two years.

DO NOT spray if rain is likely within 3 hours.

CROP	CROP STAGE	WEED	WEED STAGE	STATE	RATE/HA	CRITICAL COMMENTS	
Barley, Oats, Triticale, Wheat	Pre-sowing	Capeweed	Up to 8 leaf and maximum 10cm diameter	WA only	150mL plus knockdown herbicide	Pre-sowing: this rate should only be used in tank mixture with formulations of paraquat/diquat or glyphosate.	
	Post-sowing Pre-emergence through to 3 leaf				150mL plus Diuron at 300mL/ha	Post Sowing Pre-emergent to 3-leaf: This rate should only be used in tank mixture with Diuron for control of transplants. Refer to Diuron label for specific rates.	
	Early post-emergence (2 leaf to jointing)		Cotyledons to 6 leaf and maximum 5cm diameter		150mL	Early Post-Emergent: Weeds should be growing actively and not larger than 5cm diameter.	
	4-5 leaf onwards		Capeweed, Soldier Thistle	Up to 10cm diameter (4-8 leaf)	NSW, ACT, VIC, TAS, SA, WA only	300mL	Weeds should be young and actively growing. Weeds will become stunted and not be competitive soon after application although final results may not show for some weeks. Faba beans and lupins will only be suppressed. Use 75mL/ha rate only in combination with MCPA LVE.
			Volunteer Chickpeas, Lentils and Sunflower	Up to 6 leaf		250mL	
			Volunteer Faba Beans and Lupins	Up to 4 leaf			
	4-5 leaf onwards		Volunteer Field Peas	Maximum 10cm high or 6 nodes	NSW, ACT, VIC, TAS, SA, WA only	150mL 75mL plus 700mL/ha MCPA LVE	Weeds should be young and actively growing. Weeds will become stunted and not be competitive soon after application although final results may not show for some weeks. Faba beans and lupins will only be suppressed. Use 75mL/ha rate only in combination with MCPA LVE.
			Volunteer Medics and Seedling Lucerne	Up to 8 leaf		150mL	
			Volunteer Sub Clover	Up to 6 leaf			
			Volunteer Vetch	Runners up to 10cm maximum 16 leaf		100mL 75mL plus 700mL/ha MCPA LVE	
			Prickly Lettuce	4-6 leaf and maximum 8cm diameter		150mL plus 700mL/ha MCPA LVE	
			Thistles including: Nodding, Saffron, Scotch, Slender, Spear, Stemless, Variegated	Rosettes up to 10cm maximum diameter	QLD, NSW, ACT, VIC, TAS, SA, WA only	50mL plus 1.0L/ha MCPA amine (500g/L) or 50mL plus 700mL/ha MCPA LVE	
	5 leaf to late tillering	Skeleton Weed	5-15cm rosettes	NSW, ACT, VIC, SA only	500mL plus 1.0L/ha MCPA amine (500g/L)	Weeds should be a minimum 5cm in diameter and growing actively. This rate will give control until harvest and substantially reduce weed numbers the following season.	

CROP	CROP STAGE	WEED	WEED STAGE	STATE	RATE/HA	CRITICAL COMMENTS
Canola	2-8 leaf	Capeweed, Saffron Thistle, Skeleton Weed, Soldier Thistles	Up to 10cm diameter (4-8 leaf)	QLD, NSW, ACT, VIC, TAS, SA, WA only	300mL	Weeds should be young and actively growing. Weeds will become stunted and will not be competitive soon after application although final results may not show for some weeks. Skeleton Weed will only be controlled until harvest. Faba beans and lupins will only be suppressed. For the control of annual grasses, TITAN Clopyralid 300 Herbicide may be tank mixed with haloxyfop.
		Volunteer Chickpeas Lentils and Safflower	Up to 6 leaf		250mL	
		Volunteer Faba Beans and Lupins	Up to 4 leaf		250mL	
		Volunteer Field Peas	Maximum 10cm high or 6 nodes		150mL	
		Volunteer Medics and Seedling Lucerne	Up to 8 leaf		150mL	
		Volunteer Sub-clover	Up to 6 leaf			
		Volunteer Vetch	Runners up to 10cm maximum 16 leaf		100mL	
Pastures and Fallow Land	Post-emergence	Hardhead Thistle (Creeping Knapweed, Russian Knapweed)	Actively growing plants	QLD, VIC only	Hand gun: 500mL/100L of water Boom spray: 2 or 4L/ha	<p>NOTE: DO NOT USE ON LUCERNE. CLOVERS AND MEDICS WILL BE ELIMINATED FOR AT LEAST ONE YEAR.</p> <p>Victoria only: Use the lower rate only on light soils (sand and sandy loam) where a slightly lower degree of control is acceptable. Use the higher rate on all soil types where complete control is required. Addition of a wetting agent at label rates is recommended for treatment of Hardhead Thistle. Spray between September and April on actively growing plants for effective control. Thorough coverage is essential. Apply in 200 to 250L of water per hectare.</p> <p>Boom spray: Use the higher rates of TITAN Clopyralid 300 Herbicide plus MCPA on multi-crowned plants or rosettes larger than 30cm in diameter.</p> <p>Spraying may be done at any time during active growth, usually in early winter or spring. Avoid spraying during the dormant winter period or at any time when thistles are not actively growing. DO NOT spray flowering thistles.</p> <p>Pre-Spray Management: The pasture should be slightly grazed prior to spraying to reduce clover and grass cover and expose the smaller thistles to the spray. The grazed pasture should be left for 7 days to allow thistles to freshen prior to treatment.</p> <p>Post-Treatment Management: Response of thistles to treatment with TITAN Clopyralid 300 Herbicide plus MCPA mixture will be slow compared to the standard treatments with 2,4-D or MCPA. If possible delay grazing of sprayed thistles for 14 days after treatment.</p> <p>Clover Damage: TITAN Clopyralid 300 Herbicide plus MCPA mixture can be very damaging to subterranean clover. The lower rate is no more damaging than label rates of 2,4-D or MCPA. The higher rate of TITAN Clopyralid 300 Herbicide plus MCPA mixture will reduce the clover component of the pasture for about 2 months. Clover recovery will be quicker during periods of active growth.</p> <p>Hand gun (Spot spray): Treat from rosette stage to early flowering. Thorough spraying is necessary.</p> <p>Drench gun: Apply 10mL to rosette crown. To multi-crown plants, apply 10mL to each crown.</p>
		Thistles including: Nodding, Variegated, Scotch, Spear, Slender, Saffron	Rosette stage prior to stem elongation		QLD, NSW, ACT, VIC, TAS, SA only	

CROP	CROP STAGE	WEED	WEED STAGE	STATE	RATE/HA	CRITICAL COMMENTS
Pastures and Fallow Land – <i>continued</i>	Post-emergence	Nodding Thistle	Rosettes up to 20cm diameter	NSW, ACT only	100mL	Apply the spray from September to October. Apply by boom spray only. DO NOT apply to thistles over 20cm in diameter. When thistles are over 20cm in diameter use TITAN Clopyralid 300 Herbicide plus MCPA (as described above). Clover Damage: Damage to white clover will be no greater than damage with MCPA alone and less than damage from TITAN Clopyralid 300 Herbicide plus MCPA mixtures. Damage to sub-clover may be greater than with MCPA or 2,4-D alone. DO NOT use for spot treatment.
		Californian Thistle	From early buds to flowering (December to February)	VIC, TAS only	Hand gun: 250mL/100L water Boom spray: 2L/ha	Addition of a wetting agent at label rates is recommended. Retreatment of regrowth in the year following treatment will usually be necessary to achieve a high level of control. Note: Clovers and medics will be eliminated for at least one year.
Pasture, Forests, Rights-of-Way, Industrial Situations	Post-emergence	Groundsel Bush	Young seedlings to mature plants	QLD, NSW, ACT only	Hand gun: 330 or 500mL/100L of water	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than 2m tall or when growth is slow.
<i>Pinus radiata</i> plantations	Post-emergence	Silver Wattle	Active growth Spring to Summer	NSW, ACT, VIC, TAS only	Hand gun: 500mL/ 100L of water Boom and Aerial spray: 5L/ha (weeds 30cm to 2m) 7 L/ha (weeds 2 to 4m) 8.5 L/ha (weeds 4 to 8m)	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. Hand gun: Means high volume NOT low volume knapsack. Spray to give full coverage of leaves and stems. Add organosilicone surfactant at 200mL/100L for optimum results. See General Instructions for handgun spraying. Boom and Aerial Spraying: For boom spraying apply in 150 to 200L of water/ha. For aerial treatment apply in a minimum of 50L/ha of water containing 25-50% by volume of anti-evaporant oil such as Ulvapon. Mix TITAN Clopyralid 300 Herbicide and water first and then add Ulvapon. Maintain continuous agitation. Clovers and other legumes will be eliminated for at least one year.
Forests	Post-emergence	Cape Ivy	Any growth stage	VIC, TAS only	Hand gun: 3.3L/ha	Apply by hand held weed wiper or CDA at dilutions with water at 1:3. Application may be made at any time of the year provided foliage is dry at the time. Avoid spraying non-target plants.

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

WITHHOLDING PERIODS:

PASTURES and FALLOW LAND: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

CEREALS: DO NOT HARVEST FOR 10 WEEKS AFTER APPLICATION.

CANOLA: DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION.

CEREALS AND CANOLA: DO NOT GRAZE OR CUT TREATED CEREALS FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.

FORESTS except *Pinus radiata* PLANTATIONS: DO NOT GRAZE FOR 7 DAYS AFTER APPLICATION.

***Pinus radiata* PLANTATIONS: DO NOT GRAZE FOR 14 DAYS AFTER APPLICATION.**

GENERAL INSTRUCTIONS

MIXING

Half fill the spray unit with water and add the required amount of TITAN Clopyralid 300 Herbicide. Add the remaining water with the agitator running. Agitate continuously to ensure thorough mixing before and during application. Only mix sufficient chemical for each day's work.

When using with tank mixtures: Wettable powder or dry flowable formulations should be added to the spray tank first, followed by suspension concentrates (ie, flowables), then aqueous concentrates (ie, TITAN Clopyralid 300 Herbicide) and emulsifiable concentrate formulations (eg MCPA LVE).

COMPATIBILITY

TITAN Clopyralid 300 Herbicide is compatible with:

Broadleaf Herbicides: Broadleaf Herbicides: TITAN Fluroxypyr 200 EC, TITAN Bromoxynil 200 Selective Herbicide, TITAN Chlorsulfuron 750 WG Herbicide, TITAN Diuron 900 WG Herbicide, TITAN Glyphosate 450 Herbicide, TITAN MCPA Selective Herbicide, TITAN MCPA 500 LVE Selective Herbicide, TITAN Paraquat 250 Herbicide, TITAN EOS Herbicide, Terbutryn, TITAN Amine 625 Selective Herbicide.

Grass Herbicides in Cereal Crops: TITAN Diclofop-methyl 375 Selective Herbicide for Wild Oat control only.

Grass Herbicides on Broadleaf Crops: TITAN Hermes 520 Herbicide.

APPLICATION

Boom and Aerial spraying Crop and Pastures:

Apply TITAN Clopyralid 300 Herbicide in sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft, delivering 200-300 micron droplets and not less than 50L/ha water volume for boom sprayers and no less than 20L/ha for aerial applications.

Hardhead Thistle: Use a spray volume of 200-250L/ha of water.

Silver Wattle: Use a spray volume of 150-200L/ha of water by ground boom spray and minimum spray volume of 50L/ha by aircraft.

High Volume Hand Gun:

Apply the recommended mix to give full coverage of leaves and stems through a No 6-8 tip at 700-1500kPA. Spray volume for effective coverage of dense two metre high silver wattle should be 30-40 litres of spray per 100m² (10m x 10m) of infestation. For larger areas an equivalent would be 3000-4000 litres per infested hectare.

CLEANING SPRAY EQUIPMENT

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and water courses.

PARTIAL CLEANING (Before spraying other labelled or tolerant crops)

After using TITAN Clopyralid 300 Herbicide, empty the spray unit completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Quarter fill the tank with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the procedure twice.

COMPLETE CLEANING (Before spraying susceptible crops)

Before spraying sensitive crops with equipment that has been used to apply TITAN Clopyralid 300 Herbicide wash the tank and rinse the system as above. Then quarter fill the tank again and add an alkaline detergent (eg liquid SURF*, OMO*, OMOMATIC*, DRIVE*, at 500mL/100L water or the powder equivalent at 500g/100L water) and circulate throughout the system for at least 15 minutes. Drain the whole system. Remove fillers and nozzles and clean them separately. Finally flush the system with clean water and allow to drain.

GROUP I HERBICIDE

RESISTANT WEEDS WARNING

TITAN Clopyralid 300 Herbicide is a member of the pyridines group of herbicides, TITAN Clopyralid 300 Herbicide has the disruptors of plant cell growth mode of action. For weed resistance management, TITAN Clopyralid 300 Herbicide is a Group I herbicide. Some naturally occurring weed biotypes resistant to TITAN Clopyralid 300 Herbicide and other Group I 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 I 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 Clopyralid 300 Herbicide to control resistant weeds.

PROTECTION OF CROPS, NATIVE AND NON-TARGET PLANTS

DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. DO NOT apply TITAN Clopyralid 300 Herbicide to crops or pastures which are to be used for the production of compost or mulches for use with susceptible crops or plants.

The use of straw, hay or other plant material treated with TITAN Clopyralid 300 Herbicide for composting or mulching susceptible crops may damage these crops.

Avoid spray drift and vapour movement onto susceptible crops such as chickpeas, faba beans, field peas, fruit trees, lentils, lupins, lucerne, medics, ornamentals, potatoes, safflower, sub-clover, tomatoes, vegetables, vines, wattle and white clover.

Plant Back Periods: Residues in the straw of treated crops can affect subsequent susceptible crops. Susceptible crops listed above should not be sown for 9 months following any application up to 300mL/ha, 12 months following an application in excess of 300mL/ha and up to 500mL/ha.

Note: Field peas are particularly susceptible and should not be sown the season following an application of 500mL/ha. Where rates in excess of 500mL/ha have been used, susceptible crops including field peas, should not be sown for at least 2 years.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under WITHHOLDING PERIODS.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Low toxicity to fish, birds, honey bees, livestock, earthworms and aquatic organisms. DO NOT contaminate dams, rivers, drains or streams with chemical or used container.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT store near feedstuffs, fertilisers or seed.

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

SMALL SPILL MANAGEMENT

Wear protective equipment (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal. (See STORAGE AND DISPOSAL section). If necessary, wash the spill area with an alkali detergent and water and absorb as above, the wash liquid for disposal.

SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with the eyes and skin. DO NOT inhale spray mist. When preparing the spray, wear elbow-length PVC gloves and face shield. After each day's 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 and contaminated clothing.

FIRST AID

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

MATERIAL SAFETY DATA SHEET

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Clopyralid 300 Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9986 2943 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.

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