CAUTION

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

Glyphosate 360 Herbicide

ACTIVE CONSTITUENT: 360g/L GLYPHOSATE present as the ISOPROPYLAMINE SALT

GROUP M HERBICIDE

TITAN Glyphosate 360 Herbicide is a water soluble herbicide for non-selective control of many annual, aquatic and perennial weeds in the situations stated in the directions for use table.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 63078/0508 Pack Sizes: 1L, 5 L, 20 L, 110L, 200L, 1000L



TITAN AG Pty Ltd

3/14 Narabang Way, Belrose NSW 2085 Telephone 02 9986 2943 Fax 02 9986 2945 www.titanag.com.au IN A TRANSPORT EMERGENCY

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.

GENERAL WEED CONTROL - ALL STATES

GENERAL WEED CONTROL – ALL STATES	
SITUATION	CRITICAL COMMENTS - Read General Application Information before using,
For general weed control in Domestic areas (Home gardens), Commercial, Industrial and Public Service areas, Agricultural buildings and other farms situations.	 For the control of many grasses and broadleaf weeds <u>Rate:</u> 10mL per litre of water. Apply when weeds are actively growing. Apply to ensure complete and uniform wetting of foliage. Visible symptoms may take from 3 to 7 days to develop.
For specific weeds, brush and woody weeds or unwanted trees, refer to the appropriate Weeds Controlled table.	
USE SITUATIONS - ALL STATES (EXCEP	T WHERE NOTED). FOR RATES OF APPLICATION AND WEEDS CONTROLLED, SEE WEEDS CONTROLLED TABLE.
NON-AGRICULTURAL AREAS Around buildings, Commercial and Industrial areas, Domestic and public service areas, Right-of-ways.	TITAN Glyphosate 360 Herbicide does not provide residual weed control. For residual control of annual weeds, TITAN Glyphosate 360 Herbicide may be tank-mixed with certain residual herbicides. See TANK MIXTURES/COMPATIBILITY.
AGRICULTURAL AREAS	TITAN Glyphosate 360 Herbicide may be used for control of annual and perennial weeds as directed, in agricultural land prior to sowing of any edible or non-edible crop, but not prior to transplanting tomato seedlings.
AQUATIC AREAS For the control of emerged weeds in all bodies of fresh and brackish water which may be flowing, non-flowing or transient. Also for weeds on margins or streams, lakes and dams in channels and drains.	Reduction in effectiveness may result if more than 1/4 of the above ground portion of the weed is submerged at treatment. Submerging the treated plants following treatment may result in the spray being washed from the plant surface, thus reducing effectiveness. DO NOT apply to this product within 0.5km up-stream of potable water intake in flowing water (ie river or streams, etc) or within 0.5km of a potable water intake in a standing body of water such as a lake, pond or reservoir. Applications to moving bodies of water should be made while travelling up stream wherever possible to prevent concentration of this herbicide in water. When making any bankside applications do not overspray more than 0.5m into open water. Avoid spraying across moving bodies of water or where weeds do not exist. When spraying floating weeds, use a low volume, low pressure boom spray, CDA or sprinkler sprayer. DO NOT submerge the weeds when spraying as this may wash the herbicide off the leaves. When emerged infestations require the treatment of the total surface area of impounded water, treating the area in strips may avoid sudden impact on habitat.
FORESTS	TITAN Glyphosate 360 Herbicide may be used prior to establishment of nurseries, for site preparation prior to planting and amongst established trees using a directed or shielded spray, or using selective wiper equipment. DO NOT allow wiper surface to contact any part of the tree. DO NOT allow spray or spray drift to contact foliage or green bark of desirable trees, since severe injury may result.
PEANUTS, COTTON, SOYBEANS, SUGARCANE, NAVY BEANS AND CHICKPEAS Application using selective equipment QLD, NSW only	WIPER EQUIPMENT. Apply TITAN Glyphosate 360 Herbicide to weeds growing between crop rows or to weeds growing at least 15cm above the crop. DO NOT allow wiper to contact crop and ensure operating conditions do not allow solution to drip from applicator since severe injury may result. Refer to WIPER EQUIPMENT in the APPLICATION section of the label.
	SHIELDED SPRAYERS (Cotton only). Apply TITAN Glyphosate 360 Herbicide to weeds growing between crop rows using a shielded sprayer. Refer to the Weeds Controlled tables for rates of application. DO NOT apply in crops less than 20cm high. DO NOT allow spray or spray drift to contact part of the cotton plant as severe injury or destruction may result.
TREE AND VINE CROPS Avocado, Banana, Blueberries, Citrus fruit, Custard apples, Dubosia Figs – dessert, Guava, Kiwifruit, Litchi, Mango, Monstera – fruit, Nuts (including Almond, pecan, Macadamia, Pistachio and Walnut), Olives, Pawpaw, Persimmons, Pome fruit, Raspberries, Stone fruit, Tea, Vineyards	Apply as directed or shielded spray or using wiper equipment. DO NOT apply as a spray near trees or vines less than 3 years old unless they are effectively shielded from spray and spray drift. DO NOT allow wiper surface to contact any part of the tree, vine or plant. Citrus fruit, Nuts, Olives and Pome fruit & vegetables: DO NOT allow spray or spray drift to contact green bark or stems, canes, laterals, suckers, fresh wounds, foliage or fruit. Tea: Apply a maximum of 4L/ha by shielded boom or directed off-centre, nozzle or 0.5L/ 100L by directed handgun or knapsack to avoid application to the crop. All other crops: DO NOT allow spray or spray drift to contact any part of the plant including the trunk. Caution: Where split bark on Kiwifruit and greens stems on Pawpaw occur, extreme care is required. For residual control of annual weeds. TITAN Glyphosate 360 Herbicide may be tank-mixed with compatible herbicides which are labelled for use in the above crops. See Tank Mixtures/Compatibility for directions.
USE SITUATIONS - ALL STATES (EXCEP	T WHERE NOTED). FOR RATES OF APPLICATION AND WEEDS CONTROLLED, SEE WEEDS CONTROLLED TABLE.
SUGARCANE RATOON SPRAYOUT For control of sugar cane ratoon regrowth (Saccharum officinale) QLD and NSW only	Apply under good growing conditions only to actively growing ratoons 60-120cm tall. DO NOT apply if plants are under stress from low moisture or waterlogging. Rate: 4-9L/ha. Use the lower rate for suppression or where cultivation is to follow. Use the higher rate for control.
PASTURE	DIRECTED (SPOT) APPLICATION: TITAN Glyphosate 360 Herbicide is non-selective and may damage or kill any plant in the sprayed area. Re-treatment and/or posture improvement may be necessary to restrict seedling re-establishment. SELECTIVE APPLICATION: See Wiper Equipment . BOOM APPLICATION: TITAN Glyphosate 360 Herbicide may be used to suppress or kill existing pasture species prior to re-seeding or establishment of other crops. Where spot application (spray or wiper) is undertaken, grazing stock need not be removed. Caution: Certain plants may be naturally toxic to stock. Where known toxic plants are present, DO NOT allow stock to graze until complete browning of treated plants has occurred.
ONIONS Post-plant, Pre-emergence application. TAS only	For control of annual weeds and suppression of perennial weeds, including Rope Twitch. Apply TITAN Glyphosate 360 Herbicide at 1-3L/ha post sowing and at least 7 days before crop is due to emerge. DO NOT apply to emerging onion plants as severe injury will result. Use lower rate on small, actively growing annual weeds. Increase to the higher rate for larger annual weeds (over 15cm tall) and for suppression of perennial weeds.



GENERAL WEED CONTROL – ALL STATES – continued

ALIENTE WEED CONTINUE ALE CIALED COMMACC						
SITUATION	CRITICAL COMMENTS - Read General Application Information before using,					
(Milk Thistle) (Sonchus oleraceus) and seasonal suppression of Nutgrass (Cyperus rotundus) QLD and NSW only.	DO NOT APPLY TO CROPS INTENDED FOR SEED PRODUCTION. Apply alone or in tank mixtures with Dropp* or Harvade*. Apply when at least 60% of bolls are open and immature bolls cannot be easily cut with a sharp knife. Where a leafy crop canopy limits spray coverage, reduced weed control can be expected. For best results under these conditions, delay application until canopy re-opens following initial conditioning treatment. Where control of Nutgrass or Noogoora Burr is required, treatments should be applied prior to the onset of frosts. When tank-mixed with defoliants, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used. Read and follow all label directions for the tank mix products. Rate: Apply 2.5L/ha for Nutgrass control and 1.25-2.5L/ha for the other weeds. Use the lower rate on light infestations of small weeds, when the crop canopy allows adequate spray coverage of the weeds. Increase to the higher rate when					
	the crop canopy may limit spray coverage, when treating dense infestations, or when treating larger weeds.					

ANNUAL WEEDS - NON-CULTIVATED OPTIONS

WEEDS CONTROLLED (ALL STATES)		RATE	CRITICAL COMMENTS (Read application Checklist before using)
Amaranth Barley Grass	Amaranthus spp. Hordeum leporinum	BOOM: 2-3L per ha	Annual weeds may be sprayed anytime they are actively growing.
Barnyard Grass Brome Grass Caltrop	Echinochioa crus-galli Bromus spp. Tribulus terrestris	HANDGUN: 500-700mL per 100L	Use the lower rate on weeds up to 15cm tall; increase to the higher rate where weeds are over 15cm tall.
Canary Grass (Annual Phalaris) Capeweed	Phalaris spp. Arctotheca calendula	KNAPSACK: 75-100mL per 15L	Visible symptoms develop in 3-7 days but complete desiccation may take 20-30 days under cool conditions.
Cereals Chickweed	(volunteer wheat, barley, oats, sorghum) Stellaria media	WIPER EQUIPMENT and CONTROLLED DROPLET APPLICATORS See APPLICATION section.	TITAN Glyphosate 360 Herbicide does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds.
Cobbler's Pegs	Bidens pilosa		gorimating woods.
Deadnettle Doublegee Fumitory	Lamium alplexicaule Emex australis Fumaria officinalis		For residual control of annual weeds, TITAN Glyphosate 360 Herbicide may be tank-mixed with certain residual herbicides. See TANK MIXTURES/COMPATIBILITY for directions.
Lesser Swinecress Ground Cherry Liverseed Grass Paradoxa Grass	F. muralis Coronopus didymus Physalis ixocarpa Urochloa paniicoides Phalaris parodoxa		
Paterson's Curse Pigweed Potato Weed	Echium plantagineum Portulaca olerocea Gallinsoga parviflora		
Ryegrass Saffron Thistle Silver Grass	Lolium rigdum Corthamus lanatus Vulpia spp.		
Sow Thistle Spear Thistle Spiny Burrgrass	Sonchus oleraceus Cirsium vulgare Cenchrus spp.		
Spurge Sub. Clover	Euphorbia spp. Trifolium subterraneum		
Thornapple Wild Mustard Wild Oats	Datura spp. Sisymbruim officinale Avena spp.		
Wild Turnip Winter Grass Variegated Thistle	Brassica tournefortii Poa annua Silybum marianum		

PERENNIAL WEEDS

WEEDS CONTROLLED (ALL STATES)	STATE	R	ATE	CRITICAL COMMENTS	
,		Boom L/ha	Handgun/ Knapsack Vol/1 litre	(Read application Checklist before using)	
Bamboo (Bambusa spp.)	ALL STATES	ı	10mL	Apply to actively growing foliage and/or regrowth which is between 1m and 2m tall. <u>Cut Stump:</u> Dilute 1:6 i.e. mix 1 part TITAN Glyphosate 360 Herbicide plus 6 parts water. Cut stems back to 20cm high, pour mixture down hollow stem or wet the cut.	
Bent Grass (Agrostis capillaris)	VIC, TAS only	2.5L	5mL	Apply to actively growing plants in late Spring when they have some seed-head development, but before Summer moisture stress. Follow-up management is required. Full disturbance with a tyned implement should follow 10-21 days after spraying. Then follow with a Summer crop and/or re-seeded pasture or crop in the following Autumn.	
Blady Grass (<i>Imperata cylindrica</i>)	QLD, NSW only	9L	13mL	Apply to actively growing plants at the early head stage.	
Bracken (<i>Pteridium esculentum</i>)	ALL STATES	9L	15mL	For boom application, always add Pulse* (200mL per 100L spray) otherwise reduced results will occur. Addition of PULSE (200mL/100L spray) may improve control with handgun application. Wiper application is recommended, see Wiper Equipment. Double pass application is required for pipewick equipment. Bracken should be slashed in Winter/Spring prior to treatment. Apply TITAN Glyphosate 360 Herbicide in March/May to fully unfurled actively growing fronds but prior to frosts. Visible symptoms may not be fully apparent until the next season. Complete control will not be achieved from one application. Repeat treatment is recommended, preferably associated with pasture improvement.	



PERENNIAL WEEDS

PERENNIAL WEEDS	1			
WEEDS CONTROLLED (ALL STATES)	STATE	Boom L/ha	TE Handgun/ Knapsack Vol/1 litre	CRITICAL COMMENTS (Read application Checklist before using)
Brown Beetle Grass (<i>Diplachne fusca</i>)	NSW only	3L	5mL	Refer to critical comments for Aquatic Areas in General Use Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Apply to actively growing plants. DO NOT apply to partially submerged plants.
Carpet Grass (Axonopus spp.)	ALL STATES	3L	5mL	Apply to actively growing plants of the early head stage.
Cocksfoot (Dactylis glomerata)	ALL STATES	3L	7mL	Apply to actively growing plants at the early head stage.
Couch (Cynodon dactylon)	ALL STATES	9L	13mL	Apply to actively growing plants when most have reached early head stage. In SA and WA apply to active plants during Oct/Nov for best results.
Cumbungi (<i>Typha</i> spp.)	ALL STATES	9L	13mL	Refer to critical comments for Aquatic Areas in General Use Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Apply to actively growing plants at the early head to full head stage (Summer/Autumn). Retreatment may be required to restrict seedling re-establishment. Wiper application is recommended (not in Tasmania). See Wiper Equipment.
Flatweed (Cat's Ear) (<i>Hypochoeris radicata</i>)	ALL STATES	3L	7mL	Apply to fully developed rosettes of the early flower stage.
Glyceria (<i>Glyceria maxima</i>)	TAS only	6L	10mL	Apply to actively growing plants at the mature head stage in late Summer/Autumn. Add a non-ionic surfactant (50-60% ai) at 200-250mL/100L. Note: Control of Glyceria is only allowable in dry drains and channels and dry margins of dams, lakes and streams. DO NOT apply to weeds growing in or over water. DO NOT spray across open bodies of water and do NOT allow spray to enter the water. DO NOT allow water to return to dry channels and drains within 4 days of application.
Guinea Grass (<i>Pancum maximum</i>)	ALL STATES	9L	13mL	Apply to actively growing plants at the early head stage. For wiper application, see Wiper Equipment .
Hoary Cress (<i>Cardria drabe</i>)	NSW, VIC, TAS only	1.5L	5mL	For maximum long-term reduction apply from late July to September when plants are in late rosette to flowing stage. Plants should be actively growing and not under stress of drought, frost or waterlogging. Application may be integrated with long fallow. Cultivation may start 7 days after spraying. Wiper application may be used where sufficient stem elongation occurs see Wiper Equipment . In Tasmania addition of a non-ionic Surfactant (50-60% ai) at 200-250mL/100L spray, is recommended.
Johnson Grass (<i>Sorghum halepense</i>), Kangaroo Grass (<i>Themeda australis</i>), Kikuyu Grass (<i>Penniseturn clandestinum</i>)	ALL STATES	6L	10mL	Apply to actively growing plants at the early head stage. For wiper application on Johnson Grass, off-type and volunteer sorghum, see Wiper Equipment .
Lovegrass, African (<i>Eragrostis curvula</i>)	NSW, Vic, WA only	6L	10mL	Apply to actively growing plants. Re-treatments and/or posture improvement is recommended to restrict re-establishment.
Nutgrass (<i>Cyperus rotundus</i>) Does not refer to other Cyperus Species which may be locally know as Nutgrass	ALL STATES	6L	10mL	Not cultivated situations. Apply to actively growing plants in late Summer/Autumn (Feb/Apr) when at least 20% have reached the head stage.
		3L + 3L	7mL + 7mL	Arable Land: Make first application to actively growing plants when at least 20% have reached the head stage (normally about Feb). After allowing maximum re-emergence to occur (normally in 6-8 weeks) it is essential to make a second application. Note: In arable land nutgrass may rapidly regenerate from isolated nuts. Follow-up treatments should be made as part of a Nutgrass control program.
Pampas Grass (<i>Cortaderia</i> spp.)	ALL STATES	-	10mL or 13mL	Apply to actively growing plants during Spring, Summer or Autumn. Ensure complete coverage and the foliage. For best results apply after flowering. For easier access, large plants may be cut or burnt prior to spraying, but first allow regrowth to reach 1m. Use the higher rate on plants over 1m high. Low Volume Applications: Use 1:9 (10%) mixture of TITAN Glyphosate 360 Herbicide: Water. Apply 2 x 2mL per 0.5m height. Ensure spray contacts all foliage.
Paragrass (<i>Barchiara mutica</i>)	ALL STATES	9L	13mL	Refer to critical comments for Aquatic Areas in General Use Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations Apply to actively growing plants at the early head stage.
Paspalum (<i>Paspalum dilataum</i>)	ALL STATES	6L	10mL	Apply to actively growing plants at the early head stage.
Pellitory (<i>Patrietria judaica</i>)	NSW only	-	10mL	Apply to actively growing plants prior to seeding. Repeat applications may be necessary to control seedlings and/or regrowth.



PERENNIAL WEEDS

PERENNIAL WEEDS						
WEEDS CONTROLLED (ALL STATES)	STATE RAT Boom L/ha		TE Handgun/	CRITICAL COMMENTS (Read application Checklist before using)		
		Boom L/na	Knapsack Vol/1 litre	(Read application Checklist before using)		
Phalaris (<i>Phalaris aquatica</i>)	NSW, VIC, SA only	3-6L	5-10mL	Apply to actively growing plants during Winter-Spring. Use the lower rate where only knockdown is required e.g. prior to burning of firebreaks. Burning can usually start 14-21 days after spraying. For long-term control increase to the higher rate.		
Phragmites, Common Reed (Phragmites australis)	ALL STATES	9L	13mL	Refer to critical comments for Aquatic Areas in General use Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Apply to actively growing, fully developed plants approaching the early head stage. Visible symptoms of control may be slow to develop and may not be fully apparent until the next season. For wiper application, see Wiper Equipment .		
Plantains (<i>Plantago</i> spp.)	ALL STATES	3L	7mL	Apply to actively growing plants of the early head stage. Symptoms may be slow to develop.		
Prairie Grass (<i>Bromus uniolodies</i>), Qld Blue Grass (<i>Dichanthium sericeum</i>), Red-Leg Grass (<i>Bothriochloa ambigua</i>), Rhodes Grass (<i>Chloris gayana</i>)	ALL STATES	6L	10mL	Apply to actively growing plants at the early head stage.		
Rope Twitch (<i>Agropyton repens</i>)	VIC, TAS only	6L	10mL	Apply in late Summer-Autumn to actively growing plants with foliage at least 20cm high. To ensure maximum shoot emergence the area should NOT be cultivated in the period from the preceding Winter until the time of spraying.		
Rushes (<i>Juncus</i> spp.)	ALL STATES	1	-	Refer to critical comments for Aquatic Areas in General Use Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Apply by wiper equipment to actively growing plants Where there is a large proportion of dead foliage, pre-slashing is recommended. Allow adequate regrowth before treatment. See Wiper Equipment .		
Sedge, Tall (<i>Carex appressa</i>)	NSW, VIC, TAS only	2 or 4L	5-10mL	Refer to critical comments for Aquatic Areas in General Use table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Apply to actively growing plants in flowering to post-flowering (Oct/April). Use the lower rate only if the stand has been slashed prior to treatment. Re-treatment may be necessary. Visible symptoms may not be fully apparent for up to 3 months. Use of CDA equipment is not recommended.		
Silverleaf Nightshade (Solanum elaegnifoluim)	NSW only	-	20mL	Use ONLY under good soil moisture conditions. Apply to actively growing plants at the late flowering to berry stage. Repeat spraying will be necessary to restrict regrowth and seedling re-establishment.		
Sorrel (<i>Rumex acestosella</i>)	ALL STATES	6L	10mL	Apply to actively growing plants when most have reached the early bud stage.		
Soursob (<i>Oxalis pes-caprae</i>)	NSW, VIC, TAS , SA, WA only	1.5L	5mL	For maximum long term reduction apply from late July to early September but before natural plant yellowing (senescence) occurs. Soursob should be actively growing and not under stress of drought or waterlogging. If heavy frosting has occurred, allow recovery before spraying. If heavy grazing has occurred, allow recovery of foliage be at least 5cm before spraying.		
St John's Wort (<i>Hypericum perforatum</i>)	ALL STATES	3L	5mL	Apply to actively growing plants in the flowering to post-flowering, procumbent stem stage (generally November/May). Re-treatment, or oversowing with improved pasture species may be necessary to restrict seedling.		
Thistle, Artichoke (<i>Cynara cardunculus</i>)	VIC, SA only	3L	5mL	Apply to the rosette-early head stage.		
Thistle, Californian (<i>Cirium arvense</i>)	VIC, TAS only	6L	10mL	Apply to growing plants at the flowering stage. To ensure maximum shoot emergence the area should NOT be cultivated prior to spraying. Retreatment and/or pasture improvement may be necessary to restrict seedling re-establishment.		
Water Couch (<i>Paspalum distichum</i>)	ALL STATES	9L	13mL	Refer to critical comments for Aquatic Areas in General Use Table to minimise the entry of spray into water. DO NOT use additional surfactant / wetter unless it is approved for use in aquatic situations. Apply to actively growing plants in late Summer-Autumn (Feb/Mar). DO NOT treat after March because of the onset of Winter dormancy. Full results may be Visible until the following spring. Not more than 1/4 of the weed should be submerged at the time of treatment.		
Water Hyacinth (<i>Eichhomia crassipies</i>)	ALL STATES	6-9L	10-13mL	Refer to critical comments for Aquatic Areas in General Use, Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Apply when actively growing and at or beyond the early bloom stage of growth. Use the highest rate on dense infestations.		



PERENNIAL WEEDS

WEEDS CONTROLLED (ALL STATES)	STATE	TATE RATE		CRITICAL COMMENTS	
		Boom L/ha	Handgun/ Knapsack Vol/1 litre	(Read application Checklist before using)	
Water Lettuce (<i>Pitia stratiotes</i>)	ALL STATES	-	10-13mL	Refer to critical comments Aquatic Areas in General Use Table to minimise the entry of spray into water. DO NOT use additional surfactant/wetter unless it is approved for use in aquatic situations. Best results are obtained from mid-Summer through to Winter. Use the highest rate on dense infestations.	
Water Lily Yellow (<i>Nymphaea</i> spp.)	ALL STATES	6L	10mL	Refer to critical comments for Aquatic Areas in General Use Table to minimise the entry of spray into the water. DO NOT use additional surfactant/wetter unless it is Approved for use in aquatic situations. Apply when there is a maximum emergence of floating leaves. Allow 2-3 weeks for symptoms to develop, then retreat any unaffected plants. Use low volume sprayer. Refer to Aquatic area in General Weed Control table.	
Yorkshire Fog (<i>Holcus lantus</i>)	ALL STATES	3L	7mL	Apply to actively growing plants at the early head stage.	

UNWANTED TREES

TITAN Glyphosate 360 Herbicide may be used for control of many tree species. Ensure trees are actively growing at the time of treatment and not under stress of drought, waterlogging or cold.

STATE	METHOD	UNWANTED TREES	TREE SIZE	MIXTURE TITAN Glyphosate 360:WATER	CRITICAL COMMENTS
QLD NSW VIC TAS WA NT only	Cut Stump	Jarrah (Eucalyptus marginata), Longleaf Box (E. gonioclayx), Marri (E. calophyalia), Messmate Stringybark (E. obliqua), Narrowleaf Peppermint (E. radiata)	0-10cm basal diameter	1:15	Dilute TITAN Glyphosate 360 Herbicide with water in the recommended ratio. Cut tree close to ground and immediately wet stump surface thoroughly using splatter gun, spray, swab of brush. Remove any branches on the stump and treat cut surface.
		Privet (<i>Ligustraum</i> spp.), Rhus (<i>Toxicodendron succedaneum</i>)	0-30cm basal diameter	1:1	
	Foliar Application: Low Volume (Gas gun or Splatter gun)	Bullick (Eucalyptus megacarpa), Marri (E. calophylla), Jarrah (E. marginata)	0-1.5m height	1:15 Add 400g/L non-ionic surfactant at 20mL/10Lspray mixture	Dilute TITAN Glyphosate 360 Herbicide in the recommended ratio. Calibrate splatter gun to apply 5mL of TITAN Glyphosate 360 Herbicide
		Eucalyptus spp.	0-1.5m height	1:5 Add 400g/L non-ionic surfactant at 20mL/10L spray mixture	solution per dose, as fine spray. Apply 5mL per 0.5m tree height. Ensure spray contacts all foliage.
	Foliar Application: High Volume (Knapsack or Handgun) Eucalyptus spp. Willows (Salix babylonio		0-2.0m height	1.0-1.3L per 100L For <i>Eucalyptus</i> spp. Add 400g/L non-ionic surfactant at 200mL/100L spray mixture	Spray to wet all foliage. Use the higher rate for trees 1.0 to 2.0m high.
	Stem Injection	Flooded Gum (Eucalyptus grandis),	0-25cm basal diameter	Undiluted 1mL/cut	Use an applicator calibrated to deliver 1 or 2mL per cut. Make 5cm cuts at an
				Undiluted 2mL/cut	oblique angle to penetrate the sapwood beneath the bark. Space cuts at 13cm, centres around tree circumference below any branching, otherwise remove or treat all branches below cut. On multiple trunk trees ensure each trunk is treated.
			0-25cm basal diameter	Mixture 1:1 2mL/cut	
			Over 25 to 60cm basal diameter	Undiluted 2mL/cut	



BRUSH AND WOODY WEEDS

BRUSH AND WOODY WEEDS WEEDS CONTROLLED (ALL STATES)	STATE	RA	ATE .	CRITICAL COMMENTS			
THE STATES	OTALE	Handgun or Knapsack	Low volume TITAN Glyphosate 360: vol/1L Water				
Bitou Bush/Boneseed (Chrysamthemoides monilifera)	QLD, NSW, VIC, TAS only	5 or 10mL	1:29 or 1:19	Apply to actively growing plants. Spray to wet all foliage. Best results achieved when treated at peak flowing during Winter. DO NOT apply during periods of drought stress. Use the higher rate on bushes over 1.5m. Further treatment may be necessary to restrict re-establishment. Low Volume Application (eg. Gas gun and Splatter gun): Ensure spray contacts all foliage. Use the higher rate (1:19) on bushes over 1.5m high.			
Boxthorn, African (<i>Lycium ferocissimum</i>)	ALL STATES	7-10mL	-	Use the lower rate for young bushes; increase to the higher rate for large, mature bushes. Spray to wet all foliage. DO NOT spray during hot, dry Summer periods. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Use of CDA equipment is not recommended.			
Blackberry (<i>Rubus fruitcus</i>)	ALL STATES	10-13mL	-	Apply from flowering to leaf fall (generally Jan-May). Plants should not be under stress of high temperature, drought or frost. Spray to wet all foliage. Use the higher rate on old, dense infestations over 2m high. Visible symptoms may not be fully apparent until the next season. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Use of CDA equipment is not recommended. In Tasmania, do not treat bushes bearing mature fruit.			
Crofton Weed (Eupatoruim adenophorum)	QLD, NSW only	5mL	_	Apply to actively growing plants with full foliage. Spray to wet all foliage. Further treatment and/or pasture improvement are recommended to restrict seedling re-establishment.			
Gorse (Furze) (<i>Ulex europaeus</i>)	ALL STATES	10mL plus 400g/L non- ionic surfactant	-	Apply all year round, but only to actively growing plants. Always add Pulse*, otherwise reduced results will occur. Spray to wet all foliage. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedling and or regrowth.			
Groundsel Bush (<i>Baccharis halimifolia</i>)	QLD, NSW only	7-10mL	1:9	Apply to growing plants. DO NOT apply during Winter, nor during periods of Summer drought stress. Use the higher rate on bushes over 2m tall. Spray to wet all foliage. Further treatment and/or pasture improvements are recommended to control seedlings and/or regrowth. Low Volume Application (eg. Splatter Gun and Gas Gun): Use 1:9 (10%) mixture of TITAN Glyphosate 360 Herbicide:water. Apply 2 x 2mL dose per 0.5m bush height. Ensure spray contacts all foliage. Use of CDA equipment is not recommended.			
Hawthorn (<i>Crataegus</i> spp.)	NSW, VIC, TAS, SA, WA only	10-13mL	1:9	Apply to actively growing plants from flowering to leaf fall. Spray to wet all foliage. Use the higher rate in bushes over 2m tall. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedling and/or regrowth. Low Volume Application (eg. Splatter Gun and Gas Gun): Use 1:9 (10%) mixture of TITAN Glyphosate 360 Herbicide: water. Apply 2 x 5mL dose per 0.5m bush height. Ensure spray contacts all foliage.			
Lantana (<i>Lantana camara</i>)	QLD, NSW, NT only	10mL	1:9	Apply to actively growing plants with full foliage. Ensure complete treatment of individual plants. DO NOT spray during periods of Summer drought stress. Burning (after complete brownout). Pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Additional Pulse (200mL/100L may improve control. Low Volume (eg Splatter Gun and Gas Gun): Apply 2 x 2 mL dose per 0.5m bush height. Ensure spray contacts all foliage. Sprinkler Sprayer: Apply 6mL of a 1:9 (10%) solution to every square metre of treated area. Use of CDA equipment is not recommended.			
Mistflower (Eupatorium riparium)	QLD, NSW only	5mL	1:9	Apply to actively growing plants with full foliage. Spray to wet all foliage. Further treatment and/or pasture improvement are recommended to restrict seedling re-establishment. Sprinkler Sprayer: Apply 3mL of a 1:9 (10%) solution to every square metre of treated area.			
Sifton Bush/Chinese Scrub (<i>Cassina arcutata</i>)	QLD, NSW only	10 or 13mL	1:9	Apply when actively growing. Ensure complete coverage of the bush. Pasture improvement and/or re-treatment is recommended to control seedlings and/or regrowth. High Volume: Use the higher rate on bushes over 1m. Low Volume: Apply 40mL per 0.5m height. Wiper Application: Double pass application is required. Application is best made to small (less than 1m) green bushes.			
Sweet Briar (<i>Rosa rubiginosa</i>)	NSW, VIC, TAS, SA, WA only	15-20mL	1:9	Apply to actively growing plants from late flowering to leaf fall. Spray to wet all foliage. Use the higher rate on bushes over 1.5m high. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Low Volume (eg. Splatter Gun and Gas Gun): Apply 2 x 5mL dose per 0.5m bush height. Ensure spray contacts all foliage.			

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



GENERAL INSTRUCTIONS PRODUCT INFORMATION

TITAN Glyphosate 360 Herbicide is a non-volatile, water soluble liquid product with non-selective herbicidal activity against many annual and perennial broadleaf weeds and grasses.

TITAN Glyphosate 360 Herbicide may be used for weed control in agricultural land prior to sowing any edible or non edible crop, but not prior to transplanting tomato seedlings.

TITAN Glyphosate 360 Herbicide is absorbed by plant foliage and green stems. It is inactivated immediately in the soil and does not provide residual weed control.

TITAN Glyphosate 360 Herbicide moves through the plant from the point of contact to and into the root system. Visible effects on annual weeds take 3-7 days but on perennial weeds may not be obvious for 2-3 weeks or longer in some cases. Visible effects of control may be delayed by cool or cloudy weather. Visible effects are a gradual yellowing and wilting of the plant which advances to complete browning of the above ground growth and deterioration of underground plant parts.

Delay application until vegetation has emerged to the stages described in the Weeds Controlled tables.

Unemerged parts arising from unattached underground rhizomes or rootstocks of perennials will not be affected by spray and will continue to grow. For this reason best control of most perennial weeds is obtained at late growth stages approaching maturity.

RESISTANT WEED WARNING

TITAN Glyphosate 360 Herbicide is a member of the Glycines group of herbicides. TITAN



Glyphosate 360 Herbicide has the inhibition of EPSP synthase mode of action. For weed resistance management TITAN Glyphosate 360 Herbicide is a group M Herbicide. Some naturally occurring weed biotypes resistant to Titan Glyphosate 360 Herbicide and other inhibitors of EPSP Synthase mode of action 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 Glyphosate 360 Herbicide or other inhibitors of EPSP Synthase 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 Glyphosate 360 Herbicide to control resistant weeds.

MIXING

TITAN Glyphosate 360 mixes readily with water.

Reduced results may occur if water containing soil is used, eg. water from ponds and unlined ditches, or if hard water containing calcium salts is used. Ensure the spray tank is free of any residue of previous spray materials. Use spray solutions promptly and certainly within 5 days, since a gradual loss of actively will occur.

Fill the spray tank with one half the required amount of clean water and add the proper amount of TITAN Glyphosate 360 Herbicide. Mix well before adding the remaining portion of water. Placing the filling hose below the surface of the spray solution will prevent excessive foaming. Removing hose from tank immediately after filling will prevent back siphoning into water source.

DO NOT use mechanical agitators as these may cause excessive foaming.

DO NOT use medianical agractors as these may cause excessive loaning. Do NOT mix, store or apply this product or spray solutions of this product in galvanized steel or unlined steel containers or spray tanks, since a highly flammable gas mixture may be found. Use stainless steel, aluminium, brass, copper, fibreglass, plastic, or plastic lined containers or spray tanks. Spray tanks, pumps, lines and nozzles should be thoroughly rinsed with clean water following application to prevent corrosion.

TANK MIXTURES/COMPATIBILITY

TITAN Glyphosate 360 Herbicide may be tank mixed with the following herbicides, insecticides and additives. Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank mix products.

MIXING INSTRUCTIONS FOR ALL TANK MIXTURES

- 1. Fill the spray tank 1/3 to 1/2 full with clean water and start agitation.
- Where crystalline ammonium sulphate is recommended, wash 2% w/v (2kg/ 100L spray solution) through a top mesh screen into the tank and mix thoroughly.
- Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
- Add TiTAN Glyphosate 360 Herbicide and the remaining water. Mix thoroughly.
- 5. Add surfactant, it required, near the end of the filling process to minimise
- Always maintain adequate agitation during application and use the tank mix promptly.

TANK MIXTURES - HERBICIDES

Atrazine Flowable* (DO NOT apply tank mix for Barnyard Grass control), 2,4-D ester, Dicamba, Chlorsulfuron, simazine flowable*, Trifluralin, Pendimethalin, Metsulfuron, Triasulfuron, LVE MCPA, and TITAN Oxyfluorfen 240EC Herbicide. The addition of TITAN Oxyfluorfen 240EC Herbicide at 75mL/ha to recommended rates of TITAN Glyphosate 360 Herbicide prior to planting wheat or barley will improve knockdown and increase the speed at which treated weeds develop visible signs of phytotoxicity.

*Add crystalline ammonium sulphate as per directions below.

TANK MIXTURES ADDITIVES

Crystalline Ammonium Sulphate

Rate: 2% w/v (2kg/100L spray solutions).

(DO NOT apply the tank mix for Barnyard Grass control).

The addition of crystalline ammonium sulphate to TITAN Glyphosate 360 Herbicide, when used to control ANNUAL weeds, MAY improve the performance of TITAN Glyphosate 360 Herbicide under adverse environmental conditions such as cool, cloudy weather, and assist in minimising the antagonism in tank mixes of TITAN Glyphosate 360 Herbicide and flowable triazine herbicides.

Use only crystalline ammonium sulphate, NOT prilled or granulated forms. To test quality, dissolve 2 tablespoons in 2 litres of water. Swirl gently for 2 minutes. If undissolved particles remain, it is advisable to pre dissolve prior to adding to spray tank through a screen. Ammonium sulphate may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

It is recommended that Codacide Adjuvant be added to this product. Refer to Codacide label for rates.

APPLICATION

400g/L non ionic surfactant

Rate: 200mL/100L spray solution

Add when treating Bracken (boom application), Gorse, Eucalypt suckers and Lantana.

WETTER TX - SURFACTANT

Rate: 200mL/100L spray solution

Add when treating Annual Ryegrass in Spring (from beginning August to end October).

Wetter $\dot{T}X$ is not a general purpose surfactant and should be used only where recommended.

TANK MIXTURES - INSECTICIDES

This product is compatible with the following insecticides:

Dimethoate, Imidan*, Le Mat*, Lorsban* 500, Metasystox, Perfekthion* EC400, Sumithion* ULV, and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

TITAN Glyphosate 360 Herbicide is a non-selective translocated herbicide. Direct spray contact, or even slight drift, may cause severe injury or destruction of any growing crop or other desirable plants including trees. Clean all equipment after use by thoroughly washing with water.

BOOM EQUIPMENT

Use recommended rates of Glyphosate in 25 to 200 litres of clean water per hectare.

When using TITAN Glyphosate 360 Herbicide of 500mL-1.5L/ha spray volumes in the range 25-100L/ha are preferred. Fan nozzle equipment is recommended, using pressures in the range 240 280 kPa. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

HIGH VOLUME APPLICATION (eg. Knapsack/Handgun Equipment)

The dilution rate is given as vol/1 litre eg: 10mL Titan Glyphosate 360 Herbicide per litre of water. This is equal to 150mL Titan Glyphosate 360 Herbicide per 15 litres of water or 1 litre per 100 litres of water. Adjust equipment to achieve an even spray pattern. Apply to ensure complete and uniform wetting of all foliage. For handgun equipment, a D6 spray tip (Spraying Systems Australia P/L) or equivalent, and an operating pressure of 400-700 kPa are recommended.

LOW VOLUME APPLICATION (eg. Gas Gun or Splatter Gun)

Apply as an even spray to cover all foliage.

Refer to Weeds Controlled for the dilution and volume of mixture to be applied. The dilution is specified as "Low volume mixture, Titan Glyphosate 360 Herbicide: Water". For example, a 1:9 mixture equals one part TITAN Glyphosate 360 Herbicide plus 9 parts water.

WIPER EQUIPMENT

Wiper Equipment (eg. ropewick, canvas, felt or carpet applicators) may be used to apply TITAN Glyphosate 360 Herbicide on to weeds growing in oilseed crops, sugarcane, cotton, seed and pod vegetables, tree and vine crops specified in this label, pasture and non crop areas Avoid contact with desirable vegetation. Operate wiper equipment a minimum of 10cm above the crop or pasture. Weeds should be at least 15cm above the crop or pasture at time of application. Speed of travel should be no greater than 8km/hr. Best results are achieved at lower speeds and where two applications are made in opposite directions (double pass).



Where weeds are of variable height, or occur in dense infestations or clumps, some plants may not be contacted by the herbicide solution. In these cases repeat treatment may be necessary. Mix only enough herbicide solution for immediate requirements. DO NOT store mixed solution for more than a few days. Flush out equipment with water after use.

<u>Rate:</u> Mix 1 litre TITAN Glyphosate 360 Herbicide with 2 litres clean water to prepare 33% solution. TITAN Glyphosate 360 Herbicide may be used according to the above directions for suppression or control of many annual and perennial weeds. See Weeds Controlled tables for specific use recommendations.

APPLICATION

Controlled Droplet Application Equipment (CDA)

Use the following table as a guide for achieving the correct application rates using the Micron 10 Herbi or similar equipment. See Weeds Controlled tables for specific rates and use recommendations. For hand held equipment a walking speed of approximately 1m/sec (4km/h) is recommended.

DO NOT add oils to TITAN Glyphosate 360 Herbicide /water mixture, otherwise difficulty in application and reduced weed control may occur.

Caution: CDA equipment produces a fine spray pattern which is not easily visible. Ensure spray pattern or drift does not contact foliage or any other green tissue of desirable plants, since severe injury or destruction may result.

Rate of TITAN Glyphosate 360 Herbicide

delivered at 1m/sec	3L/ha	6L/ha	9L/ha
Mixture (by volume) Glyphosate 360:Water	1:3	1:1	2:1
Micron Herbi, nozzle	Blue	Blue	Yellow

AERIAL EQUIPMENT

Aerial equipment may be used to apply Titan Glyphosate360 only in pasture or fallow situations prior to establishment of field crops, fodder crops, or new pasture, and for pre harvest application to cotton and sorghum crops.

DO NOT use in intensive horticultural cropping areas. Use recommended rates of Glyphosate specified in this label up to a maximum limit of 4L/ha.

For Micronair and boom equipment, apply in a minimum spray volume of at least 20L/ha. Droplets with an average size (or VMD) of 250-350 micron dia. are recommended. Swath width should be 15-17m. Thoroughly wash aircraft, especially landing hear, after each day of spraying to remove herbicide residues.

GENERAL APPLICATION INFORMATION

The addition of a non ionic surfactant is recommended at a rate of 100mL of a 600g/L product (or equivalent) per 100L spray solution.

DO NOT treat weeds under poor growing or dormant conditions (such as occur in drought, waterlogging, disease, insect damage or following frosts) as reduced weed control may result.

Reduced efficacy may also occur when treating weeds heavily covered with dust or silt.

DO NOT add additional surfactant, or mix with any other agricultural chemicals, herbicide oils, or other materials except as specifically directed on this label. Rainfall occurring up to 6 hours after application may reduce effectiveness. Heavy rainfall within 2 hours after application may wash the chemical off the foliage and a repeat treatment may be required.

Delay treatment of plants wet with dew or rain if water droplets run off when plants are disturbed.

DO NOT disturb treated weeds by cultivation, sowing or grazing for one day after treatment of annual weeds and 7 days for perennial weeds, to ensure herbicide absorption.

A Withholding Period for grazing stock is not required. However, it is recommended that grazing of treated plants be delayed (as recommended above) to ensure herbicide absorption. Certain plants such as, Soursob, St John's Wort and Bracken, may be naturally toxic to stock. Where known toxic plants are present, grazing should be delayed until complete browning of treated plants has occurred.

APPLICATION ON HILLY TERRAIN

As spraying height may vary, to maximise target contact, increase water volume to 30-80L/ha and increase droplets size to at least 300 micron VMD.

APPLICATION UNDER SUMMER CONDITIONS

High temperatures and/or low relative humidity cause excessive evaporation of spray droplets which may reduce results. When temperature reaches 25°C, increase water volume to at least 30L/ha. and increase droplet size to at least 300 micron VMD.

DO NOT apply TITAN Glyphosate 360 Herbicide by aircraft when temperature is above $30^{\circ}\text{C}.$

AVOID DRIFT

DO NOT use with spraying equipment or under meteorological conditions which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures.

Equipment settings which produce fine droplets (150 microns or less), winds over 8km/hr, inversion conditions, still air and hot dry days all contribute to drift.

PROTECTION OF CROP. NATIVE AND OTHER NON-TARGET PLANTS

Avoid contact with foliage, green stems or fruit of crops desirable plants and trees, since severe injury or destruction may result.

DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate dams, rivers or streams with the product or used container.

When controlling weeds near water, refer to label directions to minimise the entry of spray into the water.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool well ventilated area. DO NOT store for prolonged periods in direct sunlight. 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.

For refillable containers, empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SAFETY DIRECTIONS

Product will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing product for use, wear elbow-length PVC gloves and face shield or goggles. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash contaminated clothing, gloves and face shield or goggles. When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.

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 Glyphosate 360 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.

* Other trademarks

