

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

**TITAN**

# GLYPHOSATE 700

## HERBICIDE

ACTIVE CONSTITUENT: 700g/kg GLYPHOSATE present as the MONO-AMMONIUM SALT

GROUP **9** HERBICIDE

For the control of annual and perennial weeds in agricultural areas, tree and vine crops, pasture, commercial, industrial and public service area per the Directions for Use table.

APVMA Approval No.: 67571/111002

Pack Size: 500g; 1kg; 3kg; 5kg; 10kg; 13kg; 15kg; 20kg



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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 disturb treated weeds by cultivation, sowing or grazing for 1 day after treatment of annual weeds and 7 days for perennial weeds.  
DO NOT treat weeds under poor growing or dormant conditions such as occur in drought, water logging, disease, insect damage or following frosts.  
Reduced control may also occur when treating weeds heavily covered with dust or silt.  
Rainfall occurring up to 6 hours after application may reduce effectiveness.  
Heavy rainfall within 2 hours of application may wash the chemical off the foliage and a repeat treatment may be required.  
DO NOT use prior to sowing tomatoes.

1. GENERAL WEED CONTROL	
SITUATION	CRITICAL COMMENTS (Refer to Application Checklist before using)
For general weed control in commercial, industrial and public service areas. For specific weeds, brush and woody weeds or unwanted trees, refer to the application WEEDS CONTROLLED TABLE.	For the control of many grasses and broadleaf weeds. <u>Rate:</u> 5g 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.

2. ANNUAL WEED CONTROL				
SITUATION	WEEDS		RATE	CRITICAL COMMENTS
Non-Cultivated Situations	Amaranth	<i>Amaranthus</i> spp.	<b>Boom:</b> 1-1.6kg/ha  <b>Handgun:</b> 300-500g per 100L  <b>Knapsack:</b> 45-75g per 15L  <b>Wiper Equipment:</b> See Application section	Annual weeds may be sprayed anytime they are actively growing.
	Barley Grass	<i>Hordeum leporinum</i>		Use the lower rate on weeds up to 15cm tall, increase to the higher rate where weeds are over 15cm tall.
	Barnyard Grass	<i>Echinochloa</i> spp.		Visible symptoms develop in 3-7 days, but complete desiccation may take 20-30 days under cool conditions.
	Brome Grass	<i>Bromus</i> spp.		This product does not provide residual weed control.
	Caltrop	<i>Tribulus terrestris</i>		Repeat treatments may be necessary to control later germinating weeds.
	Canary Grass	<i>Phalaris</i> spp.		For residual control of ANNUAL weeds, this product may be used as a tank mixture with certain residual herbicides.
	Capeweed	<i>Arctotheca calendula</i>		See <b>TANK MIXTURES</b> for directions.
	Cereals	(volunteer wheat, barley, oats, sorghum)		
	Chickweed	<i>Stellaria media</i>		
	Cobblers Pegs	<i>Bidens pilosa</i>		
	Deadnettle	<i>Lamium amplexicaule</i>		
	Doublegee	<i>Emex australis</i>		
	Fumitory	<i>Fumaria</i> spp.		
	Ground Cherry	<i>Physalis angulata</i>		
	Lesser Swinecress	<i>Coronopus didymus</i>		
	Liverseed Grass	<i>Urochloa panicoides</i>		
	Mintweed	<i>Salvia reflexa</i>		
	Paradoxa Grass	<i>Phalaris paradoxa</i>		
	Patterson’s Curse	<i>Echium plantagineum</i>		
	Pigweed	<i>Portulaca oleracea</i>		
	Potato Weed	<i>Galinsoga parviflora</i>		
	Ryegrass	<i>Lolium rigidum</i>		
	Saffron Thistle	<i>Carthamus lanatus</i>		
	Silver Grass	<i>Vulpia</i> spp.		
	Sow Thistle	<i>Sonchus oleraceus</i>		
	Spear Thistle	<i>Cirsium vulgare</i>		
	Spiny Burrgrass	<i>Cenchrus</i> spp.		
	Spurge	<i>Euphorbia</i> spp.		
	Sub Clover	<i>Trifolium subterraneum</i>		
	Thornapple	<i>Datura</i> spp.		
	Wild Mustard	<i>Sisymbrium officinale</i>		
	Wild Oats	<i>Avena ludoviciana</i> , <i>A. fatua</i>		
	Wild Turnip	<i>Brassica tournefortii</i>		
	Winter Grass	<i>Poa annua</i>		
	Variegated Thistle	<i>Silybum marianum</i>		

3. PERENNIAL WEED CONTROL				
WEEDS	RATE			CRITICAL COMMENTS
	Boom kg/ha	Handgun g/100L	Knapsack g/15L	
Bamboo ( <i>Bambusa</i> spp.)	—	500g	75g	Apply to actively, growing foliage and/or regrowth which is between 1m and 2m tall. <u>Cut Stump:</u> Dilute 1:12, i.e. mix 1 part of this product plus 12 parts water. Cut stems back to 20cm high, pour mixture down hollow stem for wet the cut.
Bent Grass ( <i>Agrostis capillaris</i> )	1.3kg	250g	40g	Apply to actively growing plants in late spring when they have some seed head development but before summer moisture stress. Bent Grass should NOT be heavily grazed at spraying. Follow up management is required to limit seedling re-establishment. Full disturbance with a tined implement should follow, 10-21 days after spraying. Application of this product should be followed by reseeding pasture.
Blady Grass ( <i>Imperata cylindrica</i> )	4.5kg	700g	100g	Apply to actively growing plants at the early head stage.
Bracken ( <i>Pteridium esculentum</i> )	4.5kg plus Pulse Penetrant 200mL/100L spray	700g	115g	For boom application, always add Pulse Penetrant, otherwise reduced results will occur. Addition of Pulse Penetrant (200mL/100L spray) may improve control with handgun application. <u>Wiper Equipment:</u> Double pass application is required for pipewick equipment. Bracken should be slashed in winter/spring prior to treatment. Apply this product 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.
Carpet Grass ( <i>Axonopus</i> spp.)	1.5-3kg	500g	75g	Apply to actively growing plants at the early head stage.
Cocksfoot ( <i>Dactylis glomerata</i> )	1.5-3kg	500g	75g	Apply to actively growing plants at the early head stage.
Couch ( <i>Cynodon dactylon</i> )	4.5kg	700g	100g	Apply to actively growing plants when most have reached the early head stage. In SA and WA apply to active plants during Oct-Nov for best results.
Flatweed (Cat's Ear) ( <i>Hypochaeris radicata</i> )	1.5-3kg	500g	75g	Apply to fully developed rosettes at the early flower stage.
Glyceria ( <i>Glyceria maxima</i> )	3kg	700g	100g	Apply to actively growing plants at the mature head stage in late summer-autumn. Add Agral Spray Adjuvant 200mL/100L. <b>Note:</b> 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 water. DO NOT allow water to return to dry channels within 4 days of application.
Guinea Grass ( <i>Panicum maximum</i> )	4.5kg	700g	100g	Apply to actively growing plants when most have reached the early head stage. For Wiper application, refer Wiper Equipment section.
Hoary Cress ( <i>Cardaria draba</i> )	0.7kg	250g	40g	For maximum long-term reduction apply from late July-September when plants are in late rosette to flowering stage. Plants should be actively growing and not under stress of drought, frost or waterlogging. Application may be integrated with long fallows. Cultivation may start 7 days after spraying, Wiper equipment may be used where sufficient stem elongation occurs, refer to Wiper Equipment section. In Tasmania add Agral Spray Adjuvant at 200mL/100L spray.
Johnson Grass ( <i>Sorghum halepense</i> ), Kangaroo Grass ( <i>Themeda australis</i> ), Kikuyu Grass ( <i>Pennisetum clandestinum</i> )	3kg	500g	75g	Apply to actively growing plants when most have reached the early head stage. For application by wiper equipment on Johnson Grass, off-type and Volunteer Sorghum, refer Wiper Equipment section.
Lovegrass, African ( <i>Eragrostis curvula</i> )	3kg	500g	75g	Apply to actively growing plants. Re-treatment and/or pasture improvement is recommended to restrict seedling reestablishment.
<i>Ludwigia peruviana</i>	—	500g	75g	Apply when actively growing and at or beyond the early bloom stage of growth, but before autumn colour changes occur. Thorough coverage is necessary for best control.
Nutgrass ( <i>Cyperus rotundus</i> )	3kg	500g	75g	<u>Non-cultivated situations:</u> Apply to actively growing plants in late summer-autumn (Feb-Apr) when at least 20% have reached the head stage.
Pampas Grass ( <i>Cortaderia</i> spp.)	—	500 or 700g	75 or 100g	Apply to actively growing plants during spring, summer or autumn. Ensure complete coverage of 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. <u>Low Volume Application:</u> Use 1:19 (5%) mixture of this product to water. Apply 2x2mL per 0.5m height. Ensure spray contacts all foliage.

### 3. PERENNIAL WEED CONTROL – continued

WEEDS	RATE			CRITICAL COMMENTS
	Boom kg/ha	Handgun g/100L	Knapsack g/15L	
Paspalum ( <i>Paspalum dilitatum</i> )	3kg	500g	75g	Apply to actively growing plants when most have reached the early head stage.
Pellitory ( <i>Parietaria judaica</i> )	–	500g	75g	Apply to actively growing plants prior to seeding. Repeat applications may be necessary to control seedling and/or regrowth.
Phalaris ( <i>Phalaris aquatica</i> )	1.5-3kg	250-500g	40-75g	Apply to actively growing plants during winter-spring. Use the lower rate where only knock down is required, eg. prior to burning of firebreaks. Burning can usually start 14-21 days after spraying. For long term control increase to the higher rate.
Plantains ( <i>Plantago</i> spp.)	1.5kg	350g	50g	Apply to actively growing plants at the early head stage. Symptoms may be slow to develop.
Prairie Grass ( <i>Bromus unioloides</i> ), Qld Blue Grass ( <i>Dichanthium sericeum</i> ), Red-Leg Grass ( <i>Brothriocloa ambigua</i> ), Rhodes Grass ( <i>Chloris gayana</i> )	3kg	500g	75g	Apply to actively growing plants at the early head stage.
Rope Twitch ( <i>Agropyron repens</i> )	3kg	500g	75g	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.
Silverleaf Nightshade ( <i>Solanum elaeagnifolium</i> )	–	1kg	150g	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 acetosella</i> )	3kg	500g	75g	Apply to actively growing plants when most have reached the early budstage.
Soursob ( <i>Oxalis pes-caprae</i> )	0.7kg	250g	40g	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 to at least 5cm before spraying.
St John's Wort ( <i>Hypericum perforatum</i> )	1.5kg	250g	40g	Apply to actively growing plants in the flowering to post flowering procumbent stem stage (generally Nov-May). Retreatment or oversowing with improved pasture species may be necessary to restrict seedling or re-establishment.
Thistle, Artichoke ( <i>Cynara cardunculus</i> )	1.5-3kg	250g	40g	Apply at the rosette-early head stage.
Thistle, Californian ( <i>Cirsium arvense</i> )	3kg	500g	75g	Apply to actively growing plants in the flowering stage. To ensure maximum shoot emergence the area should NOT be cultivated prior to spraying. Re-treatment and/or pasture improvement may be necessary to restrict seedling re-establishment.
Yorkshire Fog ( <i>Holcus lanatus</i> )	1.5-3kg	500g	75g	Apply to actively growing plants at the early head stage.

### 4. BRUSH AND WOODY WEED CONTROL

WEEDS	RATE			CRITICAL COMMENTS
	Boom kg/ha	Handgun g/100L	Knapsack g/15L	
Bitou Bush/Boneseed ( <i>Chrysanthemoides monilifera</i> )	250 or 500g	40 or 75g	1:59 or 1:39	Apply to actively growing plants. Spray to wet all foliage. Best results are achieved when treated at peak flowering 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 seedling re-establishment. <u>Low Volume Application (eg. Gas gun or Splatter gun):</u> Ensure spray contacts all foliage. Use the higher rate (1:39) on bushes over 1.5m high.
Boxthorn, African ( <i>Lycium ferocissimum</i> )	350-500g	50-75g	–	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.

#### 4. BRUSH AND WOODY WEED CONTROL – continued

WEEDS	RATE			CRITICAL COMMENTS
	Boom kg/ha	Handgun g/100L	Knapsack g/15L	
Blackberry ( <i>Rubus fruticosus</i> )	500-700g	75-100g	–	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 ( <i>Eupatorium adenophorum</i> )	250g	40g	–	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.
Gorze (Furze) ( <i>Ulex europaeus</i> )	500g plus Pulse Penetrant 200mL	–	–	Apply all year round but only to actively growing plants. Always add Pulse Penetrant, otherwise reduced results will occur. Spray to wet all foliage. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth.
Groundsel Bush ( <i>Baccharis halimifolia</i> )	350-500g	50-75g	1:19	Apply to actively growing plants. DO NOT apply during winter, or 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 improvement are recommended to control seedlings and/or regrowth.  <u>Low Volume Application (eg. Gas gun or Splatter gun):</u> Use 1:19 (5%) mixture of product to water. Apply 2x2mL dose per 0.5m bush height. Ensure spray contacts all foliage. Use of CDA equipment is not recommended.
Hawthorn ( <i>Crataegus</i> spp.)	500-700g	75-100g	1:19	Apply to actively growing plants from flowering to leaf fall. Spray to wet all foliage. Use the higher rate on bushes over 2m tall. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth.  <u>Low Volume Application (eg. Gas gun or Splatter gun):</u> Use 1:19 (5%) mixture of product to water. Apply 2x2mL dose per 0.5m bush height. Ensure spray contacts all foliage.
Lantana ( <i>Lantana camara</i> )	500g	75g	1:19	Apply to actively growing plants with 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. Addition of Pulse Penetrant (200mL/100L) may improve control.  <u>Low Volume Application (eg. Gas gun or Splatter gun):</u> Use 1:19 (5%) mixture of product to water. Apply 2x2mL dose per 0.5m bush height. Ensure spray contacts all foliage.  <u>Sprinkler Sprayer:</u> Apply 6mL of a 1:19 (5%) solution to every square metre of treated area. Use of CDA equipment is not recommended.
Mistflower ( <i>Eupatorium riparium</i> )	250g	40g	1:19	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.  <u>Sprinkler Sprayer:</u> Apply 3mL of a 1:19 (5%) solution to every square metre of treated area.
Sifton Bush/Chinese Scrub ( <i>Cassine arcuata</i> )	500 or 700g	75 or 100g	1:19	Apply when actively growing. Ensure complete coverage of the bush. Pasture improvement and/or re-treatment is recommended to control seedlings and/or regrowth.  <u>High Volume:</u> Use the higher rate on bushes over 1m.  <u>Low Volume:</u> Apply 40mL per 0.5m height.  <u>Wiper Application:</u> Double pass application is required. Application is best made to small (less than 1m) green bushes.
Sweet Briar ( <i>Rosa rubiginosa</i> )	750-1000g	115-150g	1:19	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.  <u>Low Volume Application (eg. Gas gun or Splatter gun):</u> Use 1:19 (5%) mixture of product to water. Apply 2x2mL dose per 0.5m bush height. Ensure spray contacts all foliage.



5. UNWANTED TREE CONTROL – ensure trees are actively growing at time of treatment and not under stress of drought, waterlogging or cold.				
METHOD	SPECIES CONTROLLED	TREE SIZE	MIXTURE KG PRODUCT TO L WATER	CRITICAL COMMENTS
Cut Stump	Jarra (Eucalyptus marginata), Longleaf Box (E. goniocalyx), Marri (E. calophylla), Messmate Stringybark (E. obliquia), Narrowleaf Peppermint (E. radiata)	0-10cm basal diameter	1:30	Dilute with water in the recommended ratio. Cut tree close to ground and immediately wet stump surface thoroughly using Splatter Gun, spray swab of bush. Remove any branches on the stump and treat any cut surface.
Foliar Application: Low Volume (Gas gun or Splatter gun)	Bullich (Eucalyptus megacarpa), Marri (E. calophylla), Jarrah (E. marginata)	0-1.5m height	1:30 add Pulse Penetrant at 20mL/10L spray mixture	Dilute in the recommended ratio. Calibrate Splatter Gun to apply 5mL of solution per dose as a fine spray. Apply 5mL per 0.5m tree height. Ensure spray contacts all foliage.
	Eucalyptus spp.	0-1.5m height	1:10 add Pulse Penetrant at 20mL/10L spray mixture	
Foliar Application: High Volume (Knapsack or Handgun)	Eucalyptus spp., Willows (Salix babyionica)	0-2.0m height	500-700g per 100L Eucalyptus spp. add Pulse Penetrant at 200mL/100L spray mixture	Spray to wet all foliage. Use the higher rate for trees 1.0 to 2.0m high.

## 6. GENERAL USES

ALL STATES (except where noted) .

For specific rates of application refer Table 2 ANNUAL WEED CONTROL, Table 3 PERENNIAL WEED CONTROL.

For home garden uses refer to Table 1 GENERAL WEED CONTROL

SITUATION	CRITICAL COMMENTS
NON-AGRICULTURAL AREAS Around buildings, commercial and industrial areas, domestic and public service areas, rights of way.	TITAN Glyphosate 700 Herbicide does not provide residual weed control. For residual control of annual weeds, TITAN Glyphosate 700 Herbicide may be tank mixed with certain residual herbicides. See Tank Mixtures.
AGRICULTURAL AREAS	TITAN Glyphosate 700 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.
FORESTS	TITAN Glyphosate 700 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 & CHICKPEAS Application using selective equipment QLD, NSW only	Application by WIPER EQUIPMENT only. Apply 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 for application instructions. <u>Shielded Sprayers (Cotton only):</u> Apply 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 any part of the cotton plant as severe injury or destruction may result.
PASTURE	<u>Directed (Spot) Application:</u> TITAN Glyphosate 700 Herbicide is non-selective and may damage or kill any plant in the sprayed area. Re-treatment and/or pasture improvement may be necessary to restrict seedling establishment. <u>Selective Application:</u> See WIPER EQUIPMENT. <u>Boom Application:</u> TITAN Glyphosate 700 Herbicide may be used to suppress or kill existing pasture species prior to reseeding or establishment of other crops. Where spot application (spray or wiper) is undertaken, grazing stock need not be removed. <b>Caution:</b> Certain plants may be naturally toxic to stock. Where known toxic plants are present, DO NOT allow stock to graze and complete browning of treated plants has occurred.
SUGARCANE RATOON SPRAYOUT Sugar cane ratoon regrowth (Saccharum officinale)	Apply under good growing conditions to actively growing ratoons 60-120cm tall. DO NOT apply if plants are under stress from low moisture or waterlogging. <u>Rate:</u> 2-4.5kg/ha. Use the lower rate for suppression or where cultivation is to follow. Use the higher rate for control.
TREE AND VINE CROPS Avocado, Banana, Blueberries, Citrus fruit, Custard apples, Duboisia 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 palm. <u>Citrus fruit, Litchi, Nuts, Olives and Pome fruit &amp; Vineyards:</u> DO NOT allow spray or spray drift to contact green bark or stems, canes, laterals, suckers, fresh wounds, foliage or fruit. <u>Tea:</u> Apply a maximum of 2kg/ha by shielded boom or directed off-centre nozzle or 0.25kg/100L by directed handgun or knapsack to avoid application to the crop. <u>All other crops:</u> DO NOT allow spray or spray drift to contact any part of the plant including the trunk. <b>Caution:</b> Where split bark on Kiwifruit and green stems on Pawpaw occur, extreme care is required. For residual control of annual weeds, TITAN Glyphosate 700 Herbicide may be tank-mixed with compatible herbicides that are labelled for use in the above crops. See TANK MIXTURES for directions.

6. GENERAL USES – continued	
SITUATION	CRITICAL COMMENTS
DRY DRAINS & CHANNELS, DRY MARGINS OF DAMS, LAKES & 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.
ONIONS Post-plant, pre-emergence application	For control of annual weeds and suppression of perennial weeds, including Rope Twitch. Apply TITAN Glyphosate 700 Herbicide at 0.4-1.3kg/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 the 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.
COTTON PRE-HARVEST For control of Bathurst Burr ( <i>Xanthium spinosum</i> ), Noogoora Burr ( <i>Xanthium pungens</i> ), Winter annual weeds, including Sow Thistle (Milk Thistle) ( <i>Sonchus oleraceus</i> ) and the seasonal suppression of Nutgrass ( <i>Cyperus rotundus</i> ) QLD, 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 can be easily cut with a sharp knife. Where a leafy canopy limits spray coverage, reduced weed control can be expected. For best results under these conditions, delay application until the canopy re-opens following initial conditioning treatment. Where the control of Noogoora Burr or Nutgrass is required, treatments should be applied prior to the onset of frosts. When tank mixed with defoliant, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used. Read and follow all tank mix products label instructions. <u>Rate:</u> Apply 1.3kg/ha for Nutgrass control and 0.65-1.3kg/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 canopy may limit spray coverage, when treating dense infestations, or when treating larger weeds.

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

**WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.**

**GENERAL INSTRUCTIONS**

This product is a non-volatile, water soluble granule with non-selective herbicidal activity against many annual and perennial broadleaf weeds and grasses. This product is absorbed by plant foliage and green stems. It is inactivated immediately in the soil and does not provide residual weed control.

This product moves through the plant from the point of contact 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 at and following treatment. Visible effects are a gradual yellowing and wilting of the plant which advances to complete browning of 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 attached underground rhizomes of root stocks 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.

**MIXING INSTRUCTIONS**

This granular product dissolves readily in water. Where product is supplied in Water Soluble Measure Packs, these will readily break up in the spray tank and dissolve in a few minutes. From boom applications, water volumes should not be less than 6 litres per 1kg of TITAN Glyphosate 700 Herbicide.

Reduced results may occur if water containing soil is used, e.g. water from ponds and unlined ditches or of hard water containing calcium salts is used.

Ensure the spray tank is free of any residue of previous spray materials.

Fill the spray tank with one half the required amount of clean water and add the proper amount of this product. 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.

For mixing instructions for tank mixes, see **Tank Mixtures**.

**TANK MIXES**

This product may be tank-mixed with the following herbicides, insecticides and additives where recommended. Read and follow all label directions, restraints, plant-back periods, withholding periods 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.
2. Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
3. Where ammonium sulphate is recommended, add Liquid\* Boost Herbicide Adjuvant at a rate of 2L/100L spray solution and mix thoroughly.
4. Add TITAN Glyphosate 700 Herbicide as granules or as Water Soluble Measure Packs and the remaining water. Mix thoroughly to ensure granules are dispensed and any Water Soluble Bags are fully dissolved.
5. Add surfactant, if required, near the end of the filling process to minimise foaming.

6. Always maintain adequate agitation during application and use the tank mix promptly.

**TANK MIXES – HERBICIDES**

Atrazine flowable<sup>^</sup> (DO NOT apply the tank-mix for Barnyard Grass control), 2,4-D ester, dicamba, chloresulfuron, simazine flowable<sup>^</sup>, sulfometuron, pendimethalin, metsulfuron, triasulfuron, LVE MCPA and oxyfluorfen.

The addition of oxyfluorfen at 75mL/ha to recommended rates of TITAN Glyphosate 700 Herbicide prior to planting wheat or barley will improve knockdown and increase the speed at which treated weeds develop visible signs of phytotoxicity.

<sup>^</sup>Add crystalline ammonium sulphate as per directions below.

**TANK MIXES - ADDITIVES**

Ammonium Sulphate: Add Boost\* to water first at a rate of 2L/100L spray solution. (DO NOT apply the tank mix for Barnyard Grass control.)

The use of Boost with TITAN Glyphosate 700 Herbicide, when used to control ANNUAL weeds MAY improve the performance of TITAN Glyphosate 700 Herbicide under adverse environmental conditions such as cool, cloudy weather and assist in minimising the antagonism in tank mixtures of TITAN Glyphosate 700 Herbicide and flowable triazine herbicides. Boost may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

**Pulse Penetrant**

Rate: 200mL/100L spray solution.

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

**TANK MIXTURES – INSECTICIDES**

This product is compatible with the following insecticides: phosmet, dimethoate, chlorpyrifos, fenvalerate and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

**APPLICATION INFORMATION**

This product 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 this product in 75 to 200 litres of clean water per hectare. When using this product at 250-700g/ha spray volumes in the range of 25-100L/ha are preferred. Fan nozzle equipment is recommended, using pressures in the range 240-280kPa. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

**HIGH VOLUME APPLICATION (eg. Knapsack and Handgun Equipment)**

Adjust equipment to achieve an even spray pattern; for handgun equipment a D6 spray tip (Spraying Systems Australia P/L) or equivalent and an operating pressure of 400-700kPa are recommended. Apply to ensure complete and uniform wetting of all foliage.

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

Apply as even spray to cover all foliage. Refer to Weeds Controlled for the dilution and volume of mixture to be applied. The dilution is specific as "Low volume

mixture, kg Product : L Water". For example, a 1:19 mixture equals one part (1kg) product plus 19 parts (litres) water.

#### WIPER EQUIPMENT

Wiper equipment (eg. ropewick, canvas, flat or carpet applicators) may be used to apply this product on to weeds growing in pasture and non-crop area. Avoid contact with desirable vegetation. In pasture, operate wiper equipment a minimum of 10cm above the weeds. Weeds should be at least 15cm above the 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 for more than a few days. Flush out equipment with water after use.

**Rate:** Mix 1kg of this product with 5 litres clean water to prepare a 17% solution. This product 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.

#### AERIAL EQUIPMENT

TITAN Glyphosate 700 Herbicide may be applied by aircraft for the control of weeds in pastures up to a maximum rate of 2.1kg/ha where specified by this label.

DO NOT apply treatments by aircraft in situations where drift onto sensitive crops, pastures or desirable trees is likely to occur.

Apply treatments using boom or Micronair equipment using a spray volume not less than 20L/ha and using settings to produce a median droplet diameter of 250-350 microns. Swath width should be set to take into account aircraft type, wind conditions and target height. Swath width will need to be reduced to avoid striping under light wind conditions and/or application to tall, dense targets. Thoroughly wash aircraft after each day of spraying to remove herbicide residues.

#### APPLICATION ON HILLY TERRAIN

Increase water volume to 30-80L/ha and increase median droplet diameter of output to at least 300 microns to optimise deposition of spray output onto weeds.

#### AIR TEMPERATURE AND RELATIVE HUMIDITY

DO NOT apply TITAN Glyphosate 700 Herbicide by aircraft at temperatures above 30°C. Increase spray output to at least 30L/ha when temperatures rise above 25°C. Avoid application when relative humidity falls below 35%.

#### AVOID DRIFT

DO NOT apply treatments with spraying equipment or under weather conditions which are likely to cause spray drift onto nearby susceptible crops, pastures or other sensitive plants. DO NOT apply treatments under very light (<4km/h) or inversion conditions or where wind speed exceeds 12km/h.

#### APPLICATION CHECKLIST

- 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 any 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 Johns 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.
- Where required the addition of non-ionic surfactant is recommended at a rate of 100mL of a 600g/L product (or equivalent) per 100L spray solution.

#### EQUIPMENT MAINTENANCE & USAGE

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fibreglass or plastic or plastic-lined containers. This product, or spray solutions of this product, react with galvanized steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture can flash or explode if ignited by open flame spark, welders torch or other ignition source. Spray tank, pumps, lines and nozzles should be thoroughly rinsed with clean water following application to prevent extensive corrosion.

#### RESISTANT WEEDS WARNING

TITAN Glyphosate 700 Herbicide is a member of the glycine group of herbicides. TITAN Glyphosate 700 Herbicide has the inhibitor of EPSP synthase mode of action. For weed resistance management TITAN Glyphosate 700 Herbicide is a group 9 herbicide. Some naturally occurring weed biotypes resistant to TITAN Glyphosate 700 Herbicide and other inhibitors of EPSP synthase 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 700 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 700 Herbicide to control resistant weeds.

#### PROTECTION OF CROPS, 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.

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

DO NOT apply treatments under very light (<4km/h) or inversion conditions or where wind speeds exceed 12km/h.

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

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT apply to weeds growing in or over water. DO NOT spray across open bodies of water.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. DO NOT contaminate seed, feed or foodstuff. Shake empty bag into spray tank until the bag is empty. DO NOT dispose of undiluted chemicals on-site. Puncture or shred 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.

#### SAFETY DIRECTIONS

Harmful if swallowed. 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 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.

#### SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Glyphosate 700 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.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: Causes serious eye damage. Toxic to aquatic life with long lasting effects. Precautionary Statements: Wear eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Collect spillage. Dispose of contents/container in accordance with local/regional/national regulations.

