



Product Name: Titan Fluroxypyr 333 EC Herbicide  
APVMA Approval No: 88496/143096

Label Name:	Titan Fluroxypyr 333 EC Herbicide
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Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	ACTIVE CONSTITUENT: 333 g/L FLUROXYPYR  OTHER CONSTITUENTS: 409.19 g/L HYDROCARBON SOLVENT 80 g/L N-METHYL-2-PYRROLIDONE
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Mode of Action:	GROUP 4 HERBICIDE
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Statement of Claims:	For the control of a wide range of broadleaf weeds in Fallow, Lucerne, Maize, Millets, Pastures, Poppies, Sorghum, Sugarcane, Sweetcorn, Winter Cereals. Also for the control of woody weeds in Agricultural Non-Crop Areas, Commercial and Industrial Areas, Forests, Pastures and Rights-of-way as specified in the Directions For Use table.
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Net Contents:	5L - 1000L
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Restraints:	This section contains file attachment.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	<p>WITHHOLDING PERIODS:</p> <p>GRAZING: DO NOT GRAZE FAILED CROPS AND TREATED PASTURES OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.</p> <p>HARVEST: Poppies: DO NOT SPRAY POPPIES LATER THAN 10 WEEKS BEFORE HARVEST. Other Crops: NOT REQUIRED WHEN USED AS DIRECTED.</p>
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Trade Advice:	
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>RESISTANT WEEDS WARNING</p> <p>GROUP 4 HERBICIDE</p> <p>TITAN Fluroxypyr 333 EC Herbicide is a member of the pyridine group of herbicides. The product has disruptors of plant cell growth mode of action. For weed resistance management the product is a Group 4 Herbicide. Some naturally occurring weed biotypes resistant to the product and other Group 4 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 4 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 this product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or TITAN AG local representative.</p>
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Precautions:	
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Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS</p> <p>Susceptible crops include but are not limited to clovers, cotton, fruit, hops, lupins, ornamentals, peas, pine tree, potato, navy beans, safflower, shade trees, soybeans, sunflower, tobacco, tomatoes, vegetables and vines. TITAN Fluroxypyr 333 EC Herbicide can be damaging to susceptible crops during both growing and dormant periods. Grasses are normally unaffected by TITAN Fluroxypyr 333 EC Herbicide and establish quickly after treatment.</p> <p>Transitory damage can occur on some species particularly those that spread by stolons such as Couch Grass (<i>Cynodon dactylon</i>), Kikuyu Grass and Carpet Grass (<i>Axonopus</i> spp.).</p> <p>DO NOT allow spray to drift onto susceptible crops, shade trees and <i>Pinus</i> spp.</p> <p>DO NOT use under weather conditions or from spraying equipment, that may cause drift onto nearby susceptible plants/crops, cropping lands or pastures.</p> <p>Avoid spray drift and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals.</p>
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## PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under withholding periods. Poisonous plants may become more palatable after spraying, therefore livestock should be kept out of the area until the plants have died down.  
DO NOT allow stock to re-enter paddocks containing treated poisonous plants until the plants have died down.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. Alongside waterways, treat only noxious weeds and poisonous plants.

### Storage and Disposal:

#### 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-rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations.  
DO NOT burn empty containers or product.

Envirodrum Micro Matic Valve: Store the original sealed Envirodrum in a cool well-ventilated area. DO NOT store for prolonged periods in direct sunlight. 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.

1000L: Store in the closed, original container in a cool, well-ventilated areas. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs TITAN AG Pty Ltd should be advised immediately. This bulk container is reusable and remains the property of TITAN AG Pty Ltd. DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty return to TITAN AG Pty Ltd for cleaning, relabelling and refilling.

#### 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 spill area with an alkali detergent and water and absorb as above the wash liquid for disposal.

### Safety Directions:

#### SAFETY DIRECTIONS

Will irritate the eyes and skin. Avoid contact with eyes and skin. Sensitive workers should use protective equipment. When opening the container, preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, a face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

First Aid Instructions:	<p><b>FIRST AID</b></p> <p>If poisoning occurs, contact a doctor or Poisons Information Centre.  Phone Australia 131126; New Zealand 0800 764 766. If swallowed, do NOT induce vomiting. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.</p>
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First Aid Warnings:	
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**Restraints:**

DO NOT apply to plants which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (waterlogged or drought affected), poor nutrition, presence of disease or previous herbicide treatment as reduced levels of control may result. Thorough coverage of both foliage and stems, to the point of run-off, is essential for high volume applications (see GENERAL INSTRUCTIONS; application methods WOODY WEED SITUATIONS section).

DO NOT spray if rain is likely within one hour.

**SPRAY DRIFT RESTRAINTS**

Specific definitions for terms used in this section of the label can be found at [apvma.gov.au/spraydrift](http://apvma.gov.au/spraydrift)

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

## DIRECTIONS FOR USE

**TABLE 1: Woody Weeds in Agricultural non-crop areas and Rights-of-way, Commercial and Industrial areas, Forests and Pastures**

• Legumes present at the time of spraying will be severely damaged.

HIGH VOLUME APPLICATION: Dilute product with water. See General Instructions – Application Method for application details.				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE mL/100L of water	CRITICAL COMMENTS
Bathurst Burr Noogoora Burr	Seedlings and young plants up to 40cm high	QLD, NSW, WA, NT only	45	Add Uptake* Spraying Oil (see General Instructions; oils and surfactants).
Black Bindweed (Climbing Buckwheat)	Seedlings and young plants before flowering	QLD, NSW only	180	
Mimosa pigra	Apply from mid to late summer	WA, NT only		
Common Sensitive Plant	Seedlings and young plants up to flowering	QLD, WA only	300	
Bellyache Bush		QLD, NSW, WA only		
Blackberry Nightshade Bokhara Clover		QLD, NSW only		
Caltrop (Yellow Vine)	Seedlings and young plants up to 30cm diameter			
Cobblers Pegs	Up to 15cm high			
Cockspur Thorn	Up to 3m high			
Creeping Lantana	At flowering			
Crofton Weed Mistflower	Seedlings and young plants up to flowering			
Docks (Rumex spp.)	Seedlings and rosettes up to 30cm high			
Hexham Scent	Seedlings and young plants up to flowering			
Honey Locust	Seedlings and young plants up to 2m high			
Small Flowered Mallow (Marshmallow)	Seedlings and young plants up to flowering			
Yellowflower Devil's Claw	Seedlings and young plants up to flowering			
Lantana	Seedlings and regrowth 0.5 to 1.2m high	600		
	Plants and regrowth 1.2 to 2m high			
Blue Heliotrope	Flowering			
Limebush	Infestations up to 1.5m high only			
Madeira Vine	Apply at time of active growth	300	Apply to actively growing plants from October to April. Some regrowth may occur particularly when treating old woody plants with sparse canopies.	
Milkweed	3 leaf to flowering	QLD only		600
Common Sowthistle	Seedlings and young plants up to bolting	QLD, NSW only	300	Repeat applications will be necessary to control subsequent germinations.
Mother-of-millions	Seedlings and young plants before flowering		360	
Prickly Acacia	Seedlings and young plants up to 2m high	QLD only	450	Add Uptake Spraying Oil (See General Instructions; oils and surfactants).
Sida spp.	Seedlings and young plants up to flowering	QLD, NSW, WA, NT only	600	
Broadleaf Pepper Tree	Mature leaves, fruiting	QLD only	300	Winter application only.
Flannel Weed				
Snakeweed (Dark and Light Blue)	Seedling and young plants before flowering	QLD only	450	Add Uptake Spraying Oil (See General Instructions; oils and surfactants).
Stinking Passion Flower	Established plants and regrowth	QLD, WA, NT only	270	Use 42mL/15L for a knapsack.
Wandering Jew	Young plants up to and including flowering	ALL STATES	900	Some regrowth will usually occur and will require retreatment.

Wattles (including <i>Acacia aulacocarpa</i> , <i>A. decora</i> , <i>A. harpophylla</i> , <i>A. leiocalyx</i> , <i>A. salicina</i> )	Seedling plants or regrowth 0.5 to 1.2m high	QLD, NSW only	300	Apply to actively growing plants when soil moisture is plentiful. Some regrowth may occur particularly when treating old woody plants with sparse canopies and under dry conditions.
	Plants or regrowth 1.2 to 2.0m high only		600	
BASAL BARK AND CUT STUMP APPLICATION: Dilute product with diesel. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/100L of diesel	CRITICAL COMMENTS
Celtis	Basal Bark only: Young plants up to 2m high and 20cm basal diameter	QLD only	2.1	Treat stems from ground level to where multi-stemmed trunks branch.
Chinee Apple	Up to 15cm basal diameter		1.8	With basal bark, treat circumference of stem to a height of 45cm from the ground.
Cockspur Thorn	Basal Bark only: Up to 5cm basal diameter		1.2	
Mimosa Bush	Up to 5cm basal diameter	QLD, WA only	1.8	
Prickly Acacia	Up to 10cm basal diameter	QLD only	0.9	
Honey Locust	Plants up to 10cm basal diameter	QLD, NSW only	0.9	With basal bark, treat circumference of stem to a height of 45cm from the ground. For cut stump application use a rate of 5L/100L diesel for all plant sizes.
	Plants 10 to 20cm basal diameter		1.8	
	Plants >20cm basal diameter		3	
Sisal Hemp ( <i>Agave</i> spp.)	All growth stages	QLD only	1.8	Treat as an overall spray.
			6 mL undiluted product per plant	Lever out centre of plant with crowbar and immediately treat the exposed cut area.
BROADCAST AND AERIAL APPLICATION: Dilute product with water. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
<i>Mimosa pigra</i>	Actively growing plants	WA, NT only	1.8	Aerial application: Add Uptake Spraying Oil at the rate of 1L/100L spray mix. Apply to actively growing plants from mid to late summer.
LOW VOLUME, HIGH CONCENTRATE APPLICATION: Using a drench gun or gas-powered gun. See General Instructions – Application Method for application details				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/10L water	CRITICAL COMMENTS
Limebush	Isolated bushes up to 1.2m high only	QLD, NSW only	0.6	Apply a 50mL dose per 5m² of bush surface area.
Tree Violet ( <i>Melicytus dentata</i> )	Apply from late flowering to green fruit up to 1.2m high	NSW only		Apply a 50mL dose per cubic metre of bush.

TABLE 2: Established Grass Pastures				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Blue Billygoat Weed, Common Sensitive Plant, Giant Sensitive Plant, Spinyhead Sida	Apply before flowering	QLD, WA only	0.9	Add Uptake Spraying Oil at 1L/ha.
St John's Wort	Apply from bud to full bloom (usually late Nov to early Jan)	NSW, ACT, VIC only	1.8	Some regrowth will occur. Treat regrowth the following season. For best results, use at least 200L water/ha.
Silverleaf Nightshade	From onset of flowering to early berry-set (usually spring to mid-summer)	NSW only	0.45 or 0.225 + 1.2-1.6L/ha TITAN Amine 625	Add Uptake Spraying Oil at 1L/ha. To ensure maximum effect, delay application until the majority of shoots have emerged. Follow-up treatment of regrowth is critical for best control.

TABLE 3: Sorghum, Maize, Millets and Sweet Corn (NSW and QLD only)						
CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS	
Sorghum	Apply when secondary roots are present, from 4 fully expanded leaves (15cm tall) up to boot (also see Critical Comments)	Annual Ground Cherry, Wild Gooseberry	2 to 8 leaf Up to 15cm tall	0.3	<b>Sorghum:</b> From 8 leaf to boot stage, use dropper nozzles to prevent herbicide coming in contact with the crop's leaves and the growing point (meristem).	
			15 to 30cm tall	0.45		
		Apple-of-Peru	Seedling plants up to 15cm tall			
		Bathurst Burr, Noogoora Burr	2 to 8 leaf Up to 20cm tall	0.3		
	20 to 50cm tall		0.45	<b>Maize and Sweet Corn:</b> From 6 leaf to just before tasselling, use dropper nozzles to prevent the herbicides coming in contact with the crop's leaves and the growing point (meristem).		
Pigweed	Up to 10cm diameter	0.3				
		10 to 30cm diameter	0.45			
Maize and Sweet Corn	Apply when secondary roots are present, from 3 fully expanded leaves (10cm tall) up to just before tasselling (See Critical Comments)	Sesbania Pea	2 to 6 leaf Up to 10cm tall		0.9	
Millets	Spray when secondary roots have developed, usually early to mid-tillering, and not later than before heads start to form at the base of tillers (See Critical Comments)	Silverleaf Nightshade (NSW only) <sup>1</sup>	Full flower to early berry	0.45 + Uptake at 1L/ha	<b>Millets:</b> DO NOT use mixes with Atrazine.  1 This treatment may be slightly damaging to the crop. To minimise crop damage apply using dropper nozzles at all crop stages.	
		Starburr (QLD only)	Up to 12 leaf and before flowering	0.9 or 0.45 + 1.1kg/ha TITAN Atrazine 900WG		
		Thornapples	2 to 8 leaf Up to 15cm tall	0.45		
		Volunteer Sunflower	2 to 5 leaf Up to 20cm tall	0.6		
TITAN Fluroxypyr 333 EC Herbicide with Atrazine, Sorghum, Maize, Sweet Corn						
Sorghum, Maize and Sweet Corn	Spray when secondary roots have developed, usually early to mid-tillering, and not later than before heads start to form at the base of tillers (See Critical Comments)	Amaranthus spp. including: Boggabri Weed, Dwarf Amaranth, Green Amaranth, Redshank, Anoda Weed, Bladder Ketmia, Black Pigweed ( <i>Trianthema portulacastrum</i> ) Caltrop (Yellow Vine) including: <i>Tribulus terrestris</i> , <i>T. micrococcus</i> and <i>T. maximus</i> Cowvine (Peach Vine) ( <i>Ipomoea lonchophylla</i> ), Hairy Wandering Jew ( <i>Commelina benghalensis</i> ), Mintweed	Seedling plants up to 15cm tall or rosettes up to 15cm diameter	0.3 + 800g/ha TITAN Atrazine 900WG or 0.45 + 1.1kg/ha TITAN Atrazine 900WG	Use the low rate (0.3L + 800g) when weeds are small (5-7cm tall/diameter).  Use the high rate (0.45L + 1.1kg) when the weeds are larger (7-15cm tall/diameter).  TITAN Fluroxypyr 333 EC Herbicide is generally more compatible with Liquid atrazine products (see Compatibility section).  Add a surfactant (see General Instructions; oils and surfactants).  DO NOT add an oil to mixtures of TITAN Fluroxypyr 333 EC Herbicide and atrazine.	
			<i>Euphorbia davidii</i>	Cotyledons to 4 nodes up to 15cm		0.6 + 1.1kg/ha TITAN Atrazine 900WG
			Volunteer Peanuts	Up to 15cm diameter		0.6 + 2.5kg/ha TITAN Atrazine 900WG
Sweet Corn: Tasmania only						



Sweet Corn only	3 to 5 leaf	Blackberry Nightshade, Volunteer Potatoes	3 to 5 leaf	0.6	
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TABLE 4: Winter Cereals (Wheat, Barley, Oats and Triticale)					
CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE /ha	CRITICAL COMMENTS
Apply from 3 leaf to flag (Zadoks 13 to 39)	Bedstraw	1 to 3 whorl	VIC SA, WA only	0.6	1 Add either Uptake or a surfactant (see General Instructions; oils and surfactants).
	Cleavers	1 to 3 whorl	NSW, VIC only	0.6	1 Add either Uptake or a surfactant (see General Instructions; oils and surfactants).
	Black Bindweed (Climbing Buckwheat)	2 to 4 leaf	QLD, NSW only	0.31	Useful suppression only.
		2 to 6 leaf		0.45 or 0.3 + 5g/ha Titan Metsulfuron 600 WG Herbicide <sup>1</sup>	Mixtures: Mixing partners with Titan Fluroxypyr 333 EC Herbicide may reduce crop selectivity. Apply at crop growth stages according to the mixing partner's recommendation.
	Common Sowthistle	2 to 5 leaf		0.6	
	Deadnettle	2 to 6 leaf		0.9 or 0.3 + 5g/ha Titan Metsulfuron 600 WG Herbicide <sup>1</sup>	
	Spiny Emex (Doublegee, Three-cornered Jack)	2 to 4 leaf	QLD, NSW, SA, WA only		Plants 15 to 30cm tall only be suppressed.
	Prickly Lettuce	2 to 5 leaf	QLD, NSW, VIC, TAS, WA only	0.6	
	Volunteer Lupins	2 to 8 leaf	NSW, VIC, WA only	0.9	
	Volunteer Potato	10 to 15cm tall	WA, TAS only		
	Wireweed	2 to 3 leaf	QLD, NSW, VIC, TAS, SA, WA only		
			QLD, NSW only	0.3 + 5g/ha Titan Metsulfuron 600 WG Herbicide	
	Bittercress, Mustards, Shepherd's Purse, Turnip Weed, Wild Radish, Wild Turnip	Up to 8 leaf and up to 15cm diameter	QLD, NSW, VIC, TAS, SA, WA only	0.3 to 0.9 +Titan Metsulfuron 600 WG Herbicide <sup>1</sup> or Metosulam* <sup>1</sup> or MCPA LVE or MCPA amine	The Titan Fluroxypyr 333 EC Herbicide rate depends on what other weeds are present as listed above. See Mixtures comment above. Titan Metsulfuron <sup>1</sup> 600 WG Herbicide @ 5g/ha (this mix does not control Wild Radish). Metosulam* <sup>1</sup> @ 5-7g/ha (use the 5g rate on Turnip Weed only). MCPA LVE (500g/L) @ 700mL/ha. MCPA amine (500g/L) @ 1.0L/ha.

Table 5: Summer Fallow				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Annual Ground Cherry, Wild Gooseberry	2 to 8 leaf, up to 15cm tall	QLD, NSW only	0.45 <sup>2</sup>	<p>When mixing with TITAN Glyphosate 450 Herbicide to control both grass and broadleaf weeds, refer to the Titan Glyphosate 450 Herbicide label for use rates and adjuvants recommended for the grasses (see General Instructions; Compatibility Section).</p> <p>DO NOT treat plants showing symptoms from previous treatment.</p> <p>Use the high rate when longer term weed control (6-10 months) is required and delay planting crops during this period. The low rate will require follow-up treatments.</p> <p>1 Add UPTAKE Spraying Oil (See General Instructions; oils and surfactants section).</p> <p>2 Delay treatment until the maximum number of shoots have emerged, but before the onset of fruiting (late summer).</p>
Bathurst Burr, Noogoora Burr	2 to 8 leaf, up to 20cm tall	QLD, NSW, VIC, WA only		
Bellvine	Pre-flowering	QLD, NSW only	0.3 + 1.2L/ha TITAN Glyphosate 450 Herbicide	
Bladder Ketmia	4 to 8 leaf, up to 10cm tall			
Cowvine (Peach Vine) <i>Ipomoea lonchophylla</i>	2 to 10 leaf, up to 10cm diameter		0.3 + 1.0L/ha TITAN Glyphosate 450 Herbicide	
Caltrop (Yellow Vine) including: <i>Tribulus terrestris</i> , <i>T. maximus</i> and <i>T. micrococcus</i>	Up to 15cm diameter			
Pigweed	Up to 10cm diameter		0.45 <sup>1</sup>	
	Up to 60cm diameter		0.45 + 1.0L/ha TITAN Glyphosate 450 Herbicide	
<i>Polymeria pusilla</i>	2 to 10 leaf, up to 20cm diameter		0.6 <sup>1</sup> or 0.3 + 1.2L/ha TITAN Glyphosate 450 Herbicide	
Rhynchosia	Seedlings to early flowering		0.6 <sup>1</sup> or 0.225 + 0.8L/ha TITAN Glyphosate 450 Herbicide	
Smallflower Mallow or Marshmallow	Up to 8 leaf, up to 20cm	QLD, NSW only	0.6 <sup>1</sup>	
Thornapples	2 to 8 leaf, up to 15cm tall	QLD, NSW, WA only	0.45 <sup>1</sup> + or 0.3 + 1.2L/ha TITAN Glyphosate 450 Herbicide	<p>1 Add UPTAKE Spraying Oil (See General Instructions; oils and surfactants section).</p> <p>2 Delay treatment until the maximum number of shoots have emerged, but before the onset of fruiting (late summer).</p> <p>DO NOT treat plants showing symptoms from previous treatment.</p> <p>Use the high rate when longer term weed control (6-10 months) is required and delay planting crops during this period. The low rate will require follow-up treatments.</p>
Sesbania Pea	2 to 6 leaf, up to 10cm tall	NSW, QLD only	0.9 <sup>1</sup> + or 0.3 + 1.2L/ha TITAN Glyphosate 450 Herbicide	
Perennial Ground Cherry	Bud to early flowering up to 20cm tall		0.9 or 1.8 <sup>1</sup>	
Silverleaf Nightshade	Full flower to early berryset (usually Dec-Feb)	NSW only	0.45 or 0.255 + 1.2-1.6L/ha TITAN Amine 625	<p>Add Uptake Spraying Oil at the rate of 1L/100L spraying mixture.</p> <p>To ensure maximum effect, delay application until the majority of shoots have emerged. Follow-up treatment will be required to control regrowth and is critical for optimal control. If wanting to prevent seed set, repeat applications may be needed in the same season, although this does not lead to better long term control.</p>
Volunteer Peanuts	Up to 15cm diameter	QLD only	0.6 + 1.8kg/ha TITAN Atrazine 900WG	<p>Add a surfactant (see General Instructions; oils and surfactants).</p> <p><b>Important:</b> See General Instructions, Compatibility section.</p>
Volunteer Sunflowers	2 to 5 leaf, up to 20cm	NSW, QLD only	0.6	Add Uptake Spraying Oil (See General Instructions; oils and surfactants section).

Table 6: Winter Fallow				
WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE L/ha	CRITICAL COMMENTS
Bedstraw	Up to 5 whorl	VIC, SA, WA only	0.6 <sup>1</sup>	1 Add Uptake Spraying Oil (See General Instructions; oils and surfactants). 2 Add Uptake Spraying Oil or a surfactant (See General Instructions; oils and surfactants section).
Cleavers		NSW, VIC only		
Black Bindweed (Climbing Buckwheat)	2 to 8 leaf, up to 10cm diameter	QLD, NSW only	0.45 <sup>1</sup>	When mixing with TITAN Glyphosate 450 Herbicide to control both grass and broadleaf weeds, refer to the TITAN Glyphosate 450 Herbicide label for use rates and adjuvants recommended for the grasses (see General Instructions; Compatibility Section).
Common Sowthistle	2 to 5 leaf, up to 10cm diameter		0.6 <sup>1</sup> or 0.3 + 0.6L/ha TITAN Glyphosate 450 Herbicide	
Prickly Lettuce, Spiny Emex (Doublegee, Three-cornered Jack)	2 to 8 leaf		0.9 <sup>1</sup> or 0.3 <sup>2</sup> + 5g/ha TITAN Metsulfuron 600 WG Herbicide	
Wireweed	2 to 3 leaf, up to 10cm tall		0.9 <sup>1</sup> or 0.3 <sup>2</sup> + 5g/ha TITAN Metsulfuron 600 WG Herbicide or 0.3 <sup>2</sup> + 0.6L/ha TITAN Glyphosate 450 Herbicide	

Table 7: Sugarcane (Qld, NSW, NT and WA only)				
CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
From early tillering to maturity	Balsum Pear, Blackberry Nightshade, Blue Billygoat Weed, Centro, Cowpea, Giant Sensitive Plant, Lablab Bean, Noogoora Burr, Phasey Bean, Pinkburr, Prickly African Cucumber, Spinyhead Sida, Stinking Passion Flower (seedlings only)	Apply from 2 to 3 leaf until flowering	<b>Ground:</b> 0.78 <b>Aerial:</b> 0.9	For optimal weed control, delay application until just before the "close-in" stage. <b>Aerial application:</b> Apply in not less than 60L/ha water and add Uptake Spraying Oil at 1L/100L spray mixture. <b>Ground application:</b> Apply in 100-400L/ha water and add Uptake Spraying Oil at 500mL/100L of spray mixture.
	Bellvine, Morning Glory, Red or Pink Convolvulus, Star of Bethlehem		As above + 0.8L/ha TITAN Amine 625	
	Stinking Passion Flower	Established or ratoon plants with at least 1.0m of regrowth	<b>High volume:</b> 270mL/100L water <b>Knapsack:</b> 42mL/15L water	Thoroughly wet plants to the point of run-off.
	Milkweed	Seedlings and young plants up to flowering	1.8 or 1.38 + 2.2kg TITAN Atrazine 900 WG	Better control will be achieved with the atrazine mixture. Delay application until just before the cane reaches the "close-in" stage. This will improve control and minimise the number of seedlings that germinate.

Table 8: Lucerne (NSW only)				
CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
Established crops at least eighteen months old	Annual Ground Cherry, Bathurst Burr, Noogoora Burr, Wild Gooseberry	2 to 8 leaf, up to 15cm high	0.3	To minimise crop injury and to maximise weed control, cut, slash or heavily graze the Lucerne before application. Wherever possible, irrigate before application to stimulate weed growth. DO NOT treat crops growing on sandy or stony soils. DO NOT treat crops after the summer growing season (after end of March). To broaden the spectrum of weeds controlled, TITAN Fluroxypyr 333 EC Herbicide can be mixed with 2,4-DB amine.
	Pigweed	Up to 10cm diameter		

Table 9: Poppies (Tas only)				
CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE L/ha	CRITICAL COMMENTS
4 to 6 leaf	Cleavers, Fumitory	2 to 6 leaf	0.6	
	Shepherd's Purse, Wireweed		0.6 + 5L/ha TITAN Asulam 400 Herbicide	
8 to 10 leaf	Common Sowthistle, Prickly Lettuce	2 to 5 leaf	0.6	DO NOT apply TITAN Fluroxypyr 333 EC Herbicide to poppies later than the 8 to 10 leaf growth stage as a reduction of alkaloid content could occur.
	Black Nightshade	Cotyledon to 4 leaf	0.9	
	Fumitory	6 to 10 leaf		
		Volunteer Potato	From tuber initiation to flower bud	

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

## GENERAL INSTRUCTIONS

### MIXING

Titan Fluroxypyr 333 EC HERBICIDE may be mixed with water or diesel. Mix only sufficient chemical for each days use and avoid storing.

**Mixing in Water:** Half fill the spray tank with water and add the required quantity of Titan Fluroxypyr 333 EC HERBICIDE and complete filling. Agitate continuously to ensure thorough mixing before and during application.

**Mixing in Diesel:** Half fill the spray tank with diesel and add the required quantity of Titan Fluroxypyr 333 EC HERBICIDE. Add the remainder of the diesel and agitate or shake to mix contents.

**Tank Mixtures:** Wettable powder or dry flowable formulations (eg. water dispersable granules) should be added to the spray tank first, followed by suspension concentrates (flowables), water soluble salts and then emulsifiable concentrate formulations (Titan Fluroxypyr 333 EC HERBICIDE). Add spraying oils and surfactants (wettters) last.

### OILS AND SURFACTANTS

**Oils:** Use only UPTAKE Spraying Oil at the rate of 500 mL/100 L of spray mix. When using less than 100 L/ha spray volume, ensure a minimum of 250 mL/ha of Uptake is used, unless 1 L/100L or 1 L/ha is specified.

**Surfactants (wettters):** Use a 100% concentrate non-ionic surfactant such as Wetspray at 100 mL/100 L of spray mix where required.

### TANK MIX INSTRUCTIONS

Titan Fluroxypyr 333 EC HERBICIDE is compatible with the herbicides listed.

Follow any regional restrictions, and all directions and restrictions on the label, of any chemical mixed with Titan Fluroxypyr 200 EC HERBICIDE.

- atrazine (see below)
- Titan Metsulfuron 600 WG Herbicide®
- MCPA
- Titan Glyphosate 450 Herbicide (see below)
- Metosulam
- 2,4-D
- 2,4-DB
- TITAN CLODINAFOP 240 EC HERBICIDE (see below)

### ATRAZINE

#### AVOID USING HARD WATER WHEREVER POSSIBLE

Where hard water cannot be avoided, the addition of Calgon\* water conditioning agent to the spray tank, at 100 g/100 L water, before adding any herbicide may improve compatibility.

#### AGITATION IS VERY IMPORTANT WHEN MIXING Titan Fluroxypyr 333 EC HERBICIDE AND ATRAZINE.

Titan Fluroxypyr 333 EC HERBICIDE plus atrazine tank mixes must be agitated vigorously and continuously during mixing and application. After mixing DO NOT allow to stand without agitation. Ensure that the time from mixing to the end of application is not more than 2 hours.

If settling out occurs re-suspension is difficult, even with vigorous agitation.

Agitation using only the pump's by-pass is usually inadequate, particularly with larger tanks (more than 2000 L). Additional mechanical agitation will be necessary in larger tanks, computer sprayers and mixing tanks.

When additional surfactant is required, add a 100% concentrate non- ionic surfactant at 100 mL/100 L of spray mix.

DO NOT use a spraying oil when tank mixing Titan Fluroxypyr 333 EC HERBICIDE and atrazine

<b>Guidelines for Tank-Mixing Titan Fluroxypyr 333 EC HERBICIDE and Common Atrazine Formulations:</b>							
Tank mix	Rate (L/ha)	Water hardness			Minimum Water Volume (L/ha)		Comments
		Soft	Medium	Hard	Ground	Aerial	
Titan Fluroxypyr 200 EC HERBICIDE	0.45	✓	✓	✓	50	35	
Titan Fluroxypyr 333 EC HERBICIDE + Titan 900WG	0.45 + 1.1	✓	X	X	100	DO NOT use	Precipitate may be difficult to resuspend and may block nozzles

#### **TITAN CLODINAFOP 240 EC HERBICIDE**

Always use UPTAKE Spraying Oil with Titan Fluroxypyr 333 EC HERBICIDE + TITAN CLODINAFOP 240 EC HERBICIDE tank-mixes at 500 mL/100 L of spray mix with a minimum of 250 mL/ha. DO NOT mix Titan Fluroxypyr 333 EC HERBICIDE with TITAN CLODINAFOP 240 EC HERBICIDE if the grass weeds are not actively growing. Always use the maximum label rate of TITAN CLODINAFOP 240 EC HERBICIDE for the appropriate grass growth stage. DO NOT use Titan Fluroxypyr 333 EC HERBICIDE at more than 0.45 L/ha in tank mixes with TITAN CLODINAFOP 240 EC HERBICIDE.

#### **TITAN GLYPHOSATE 450 HERBICIDE**

When mixing Titan Fluroxypyr 333 EC HERBICIDE with Titan Glyphosate 450 Herbicide to control both grass and broadleaf weeds, refer to the Titan Glyphosate 450 Herbicide label for use rate and adjuvants recommended for grasses. DO NOT use Titan Glyphosate 450 Herbicide at less than 1.2 L/ha in tank mixes with Titan Fluroxypyr 200 EC HERBICIDE, when barnyard grass, buttongrass, crowsfoot grass, native millet and liverseed grass are the target species.

#### **Broadcast application in Cropping, Pasture and Fallow situations. Ground application (Boom)**

Apply Titan Fluroxypyr 333 EC HERBICIDE with an accurately calibrated boom sprayer, in at least 50 L/ha water (100-400 L/ha for sugar cane). Flat fan nozzles are recommended using pressures in the range 200 to 300 kPa. Set the boom at a height to ensure a double overlap of the nozzle patterns.

#### **Ground directed application (Dropper nozzles)**

To minimise crop effects, dropper nozzles should be used in sorghum when the crop is beyond the 8 leaf growth stage and in maize and sweetcorn when the crop is beyond the 6 leaf growth stage. Adjust the nozzles to direct the spray into the base of the crop and away from the leaves and the growing point. See manufacturers directions for setting up and calibration of dropper nozzles.

#### **Aerial Application**

Apply in a minimum volume of at least 35 L/ha water (60 L/ha in sugarcane). Use equipment calibrated to produce droplets of a MEDIUM to COARSE spray quality. DO NOT apply when the temperature is above 30°C, when there is no wind or when the wind is blowing toward susceptible crops.

## WOODY WEED SITUATIONS

Weeds must be actively growing to attain optimal effect. Delay the treatment of regrowth following bulldozing; slashing, burning, ploughing or a previous chemical treatment until it has at least 1 metre of new, vigorous, growth.

### **High Volume Application**

#### Hand Gun

Apply the recommended mix to obtain full coverage of leaves and stems using a number 6 - 8 tip at 700 to 1500 kPa. To obtain good coverage, a spray volume of 1500 to 4000 L/ha (15 to 40 L / 100 m<sup>2</sup>) is required per infested hectare. Ensure thorough coverage to the point of runoff.

#### Knapsack

Knapsack sprayers may be used on smaller infestations where penetration and coverage of the canopy is easier to achieve. Use the same use rate and spray techniques as for handgun application.

#### Low Volume, High Concentrate Application Drench Gun or Gas-Powered Gun

Apply the recommended mixture uniformly across the foliage by applying 50 mL shots to cover 4 to 5 m<sup>2</sup> of surface area of plant. This is approximately equivalent to 20 droplets per cm<sup>2</sup> of the leaf surface. Use a marking agent as recommended by the equipment manufacturer to check spray coverage.

#### Basal Bark and Cut Stump

##### Application Basal Bark

DO NOT apply to wet stems as this can repel the diesel mixture. Spray or paint the recommended mixture around the base of each stem from ground level to a height of at least 30 cm from the ground, wetting the bark to the point of runoff. Apply with a paint brush or a pressure sprayer with an appropriate lance and solid cone nozzle. If using spray equipment use low pressures ( $\leq 200$  kPa) sufficient to form a cone of spray. Old rough bark will require more spray than smooth or young thin bark.

##### Cut Stump

Apply the recommended mixture liberally to the freshly cut stump immediately after cutting. Apply by spraying or painting the cut surface and sides of the stump. Best results are obtained when the stems are cut less than 15 cm above the ground.

### **CLEANING SPRAY EQUIPMENT:**

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

Cleaning equipment after using water-based sprays:

Rinsing: After using Titan Fluroxypyr 333 EC HERBICIDE, empty the tank completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose.

Drain, and clean any filters in the tank, pump, lines, hoses and nozzles. After cleaning the tank as above, quarter fill with clean water and circulate through the pump, lines and nozzles. Drain and repeat the rinsing procedure twice.

Decontamination (before spraying cotton and other sensitive crops; see PROTECTION OF CROPS): Wash the tank and rinse the system as above. Then quarter fill the tank and add an alkali detergent (e.g. liquid SURF, OMO or DRIVE) at 500 mL / 100L of water or the powder equivalent at 500 g / 100 L and circulate throughout the system for at least 15 minutes.

Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow draining.

Cleaning equipment after using diesel - based sprays: On completion of spraying, use a degreaser such as Caltex Kwik-D-Grease® to remove traces of diesel from the sprayer. Rinse tank and spray through nozzles with water to remove degreaser. Then, quarter fill the tank with clean water and add an alkali detergent (e.g. liquid SURF® , OMO® or DRIVE® ) at 50 mL / 10 L of water or the powder equivalent at 50 g / 10 L of water. Shake sprayer, to circulate the washing solution throughout the sprayer, and then spray the solution through the nozzles.

Rinse well with clean water to remove the detergent. To clean brushes and containers, spray liberally with degreaser. Hose off with clean water and repeat using detergents as above.

DO NOT use this equipment for any other purpose