

# DANGEROUS POISON

KEEP OUT OF REACH OF CHILDREN

CAN KILL IF SWALLOWED

DO NOT PUT IN DRINK BOTTLES

KEEP LOCKED UP

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

# EOS HERBICIDE

ACTIVE CONSTITUENTS: 135g/L PARAQUAT present as PARAQUAT DICHLORIDE

115g/L DIQUAT present as DIQUAT DIBROMIDE

GROUP **22** HERBICIDE

For control of a wide range of grasses and broadleaf weeds.  
Can be utilised in crop establishment programs. Contains non-ionic wetter.  
FOR USE ONLY AS AN AGRICULTURAL HERBICIDE.  
THIS PRODUCT IS TOO HAZARDOUS TO BE USED IN THE HOME GARDEN.

APVMA Approval No.: 61860/142436

Pack Size: 20L-1000L



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**SL**

Formulation Type  
Soluble Liquid Concentrate

IN A TRANSPORT EMERGENCY  
• DIAL 000 • POLICE OR FIRE BRIGADE



UN 3016  
BIPYRIDILUM PESTICIDE,  
LIQUID, TOXIC (PARAQUAT  
(present as paraquat dichloride)),  
ENVIRONMENTALLY HAZARDOUS  
PG: III HAZCHEM: 2X

## DIRECTIONS FOR USE

### Restraints:

DO NOT spray plants which are waterlogged, under stress of any kind or covered with soil or dust.  
DO NOT spray plants covered with heavy dew, but rain following spraying will not affect results.  
DO NOT sow or cultivate for one hour after spraying.

**For ground application only:** DO NOT use through aircraft, misting machines or hand held ultra low volume controlled droplet applicators (CDA units) or back mounted equipment.

### 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.

SOUTHERN AUSTRALIA – FULL DISTURBANCE					
CROP / SITUATION	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS
<b>SOUTHERN AUSTRALIA</b> <b>DIRECT DRILLING</b> With full combine or with cultivation before spraying or with cultivation after spraying as an aid in the establishment of crops including:  <b>Winter</b> Canola, Chickpeas, Cereals (Wheat, Barley, Oats, Rye, Triticale), Field Beans, Field Peas, Lentils, Linseed, (Linola), Lupins, Vetch  <b>Spring / Summer</b> Fodder Rape, Pigeon Peas, Safflower, Sorghum, Soybeans, Sunflower  <b>PASTURE</b> Clover Grass, Lucerne, Medic	<b>Seedling grasses</b> Annual Ryegrass ( <i>Lolium rigidum</i> ), Barley Grass ( <i>Hordeum</i> spp.), Brome Grass ( <i>Bromus</i> spp.), Volunteer Cereals, Wild Oats ( <i>Avena</i> spp.)	2 to 3 leaf	0.6 to 0.8	Sthn NSW, VIC, TAS, SA, WA only	<b>Refer to Crop Establishment Procedure (1).</b> In WA apply after the autumn break within 4 weeks of weed germination. In the other States apply to young or well grazed weeds. In a typical mixed weed situation use the rate recommended for the growth stage of the hardest-to-kill weed species. Rates shown are for optimum conditions, for sowing equipment with wide points and overall soil disturbance. Under less favourable conditions or where spraying is delayed until winter or where narrow points are fitted or in higher rainfall areas, use higher rates in the range 1.2 to 2.4L/ha. For dense mature swards over 2 months old or spring crops use rates up to 2.4L/ha.  * For control of Vulpia (Silver Grass) add a wetter such as Agral at 160mL/100L or TITAN Wetter 1000 at 100mL/100L.  <b>Also refer to Crop Establishment Procedure (3) – Cultivation after spraying.</b> Cultivation can commence 30 minutes after spraying but should be completed within 7 days unless a suitable residual herbicide is added or weeds are sprayed again.  Where heavy weed growth is present at spraying a better seed bed will result if cultivation is delayed 3 to 5 days to obtain maximum root release.  <b>Also refer to Crop Establishment Procedure (4) – Cultivation before spraying.</b> Spraying may be carried out before or after sowing or transplanting but 3 days before the crop emerges.  <b>Tank Mix:</b> See Compatibility Section. Refer to partner product labels for suitability of use prior to sowing particular crops and relevant plantback periods.
		4 leaf to early tiller	0.8 to 1.6		
		Mid to fully tillered	1.6 to 2.4		
	Vulpia (Silver Grass, Sand Fescue) ( <i>Vulpia</i> spp.)	2 to 3 leaf	0.6 to 0.8*		
		4 leaf to early tiller	0.8 to 1.6*		
		Mid to fully tillered	1.6 to 2.4*		
	<b>Seedling Brassica weeds</b> Ball Mustard ( <i>Neslia paniculata</i> ), Muskweed ( <i>Myagrum perfoliatum</i> ), Shepherd's Purse ( <i>Capsella bursa-pastoris</i> ), Short Fruited Wild Turnip ( <i>Rapistrum rugosum</i> ), Ward's Weed ( <i>Carrichtera annua</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> )	1 to 5cm dia	0.8 to 1.2		
		5 to 10cm dia	1.2 to 1.6		
		10 to 20cm dia	1.6 to 2.4		
	<b>Other seedling broadleaved weeds</b> Bedstraw ( <i>Gallium tricornutum</i> ), Bifora ( <i>Bifora testiculata</i> ), Capeweed ( <i>Arctotheca calendula</i> ), Horehound ( <i>Marrubium vulgare</i> ), Ivy-leaf Speedwell ( <i>Veronica hederifolia</i> ), Lincoln Weed ( <i>Diplotaxis tenuifolia</i> ), Medic ( <i>Medicago</i> spp.), Spiny Emex (Doublegee, Three-cornered Jack) ( <i>Emex australis</i> ), Stinging Nettle ( <i>Urtica urens</i> ), Storksbill (Wild Geranium, Crowsfoot) ( <i>Erodium</i> spp.), Sub-clover ( <i>Trifolium subterraneum</i> ), Vetch (Tares) ( <i>Vicia</i> spp.)	1 to 4 leaf or 1 to 4cm dia	0.8 to 1.2		
		4 to 8 leaf or 4 to 8cm dia	1.2 to 1.6		
	Deadnettle ( <i>Lamium amplexicaule</i> ), Fumitory ( <i>Fumaria</i> spp.), Melilotus ( <i>Melilotus</i> spp.), Pimpernel ( <i>Anagallis</i> spp.), Poppy ( <i>Papaver</i> spp.), Saffron Thistle ( <i>Carthamus lanatus</i> ), Sheepweed ( <i>Buglossoides arvensis</i> )  Paterson's Curse ( <i>Echium plantagineum</i> )  Wireweed ( <i>Polygonum aviculare</i> )  Marshmallow ( <i>Malva parviflora</i> )	1 to 10 leaf or 1 to 10cm dia	0.8 to 1.2		
		1 to 5 leaf	1.2 to 1.6		
		1 to 4 leaf	0.8 to 1.2		
1 to 12 leaf		0.8 to 1.2 plus TITAN Oxyfluorfen 240 EC 75mL			
1 to 6 leaf		0.8 to 1.2 plus TITAN Metsulfuron 600 WG 5g or 0.8 to 1.2 plus TITAN Dicamba 500 500mL			

SOUTHERN AUSTRALIA – FALLOW / MINIMUM DISTURBANCE					
CROP / SITUATION	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS
<p><b>SOUTHERN AUSTRALIA</b> <b>DIRECT DRILLING</b> With minimum disturbance (disc drill, modified combine, sod seeder) or <b>FALLOWS</b> Cultivated or non-cultivated as an aid in establishing crops or Establishing and maintaining a fallow. Includes the following crops: <b>Winter</b> Canola, Chickpeas, Cereals (Wheat, Barley, Oats, Rye, Triticale), Field Beans, Field Peas, Lentils, Linseed (Linola), Lupins, Vetch <b>Spring / Summer</b> Fodder Rape, Pigeon Peas, Safflower, Sorghum, Soybeans, Sunflower</p> <p><b>PASTURE</b> Clover, Grass, Lucerne, Medic</p>	<p><b>Seedling grasses</b> Annual Ryegrass (<i>Lolium rigidum</i>), Barley Grass (<i>Hordeum</i> spp.), Brome Grass (<i>Bromus</i> spp.), Volunteer Cereals, Wild Oats (<i>Avena</i> spp.)</p> <p>Vulpia (Silver Grass, Sand Fescue) (<i>Vulpia</i> spp.)</p> <p><b>Seedling Brassica Weeds</b> Ball Mustard (<i>Neslia paniculata</i>), Charlock (<i>Sinapsis arvensis</i>), Indian Hedge Mustard (<i>Sisymbrium orientale</i>), Long Futed Wild Turnip (<i>Brassica tournefortii</i>), Muskweed (<i>Myagrum perfoliatum</i>), Shepherd's Purse (<i>Capsella bursa-pastoris</i>), Short Fruited Wild Turnip (<i>Rapistrum rugosum</i>), Ward's Weed (<i>Carrichtera annua</i>), Wild Radish (<i>Raphanus raphanistrum</i>)</p> <p><b>Other seedling broadleaved weeds</b> Bedstraw (<i>Gallium tricornutum</i>), Bifora (<i>Bifora testiculata</i>), Capeweed (<i>Arctotheca calendula</i>), Horehound (<i>Marrubium vulgare</i>), Ivy-leaf Speedwell (<i>Veronica hederifolia</i>), Lincoln Weed (<i>Diplotaxis tenuifolia</i>), Spiny Emex (Doublegee, Three-cornered Jack) (<i>Emex australis</i>), Stinging Nettle (<i>Urtica urens</i>), Storksbill (Wild Geranium Crowsfoot) (<i>Erodium</i> spp.), Vetch (Tares) (<i>Vicia</i> spp.)</p> <p>Deadnettle (<i>Lamium amplexicaule</i>), Fumitory (<i>Fumaria</i> spp.), Melilotus (<i>Melilotus</i> spp.), Pimpernel (<i>Anagallis</i> spp.), Poppy (<i>Papaver</i> spp.), Saffron Thistle (<i>Carthamus lanatus</i>), Sheepweed (<i>Buglossoides arvensis</i>)</p> <p>Paterson's Curse (<i>Echium plantagineum</i>)</p> <p>Wireweed (<i>Polygonum aviculare</i>)</p> <p>Marshmallow (<i>Malva parviflora</i>)</p> <p>Volunteer Beans, Peas, Lupins</p> <p>Medic (<i>Medicago</i> spp.), Sub-clover (<i>Trifolium subterraneum</i>)</p>	2 to 3 leaf	1 to 1.2	Sthn NSW, VIC, TAS, SA, WA only	<p><b>Refer to Crop Establishment Procedures (1), (6) or (7b) as appropriate to the particular situation.</b> In WA apply after the autumn break within 4 weeks of weed germination. In the other States apply to young or well grazed weeds. In a typical mixed weed situation use the rate recommended for the growth stage of the hardest-to-kill weed species. Rates shown are for optimum conditions and for sowing equipment with narrow points. Under less favourable conditions or where spraying is delayed until winter or in higher rainfall areas or for fallow weed control, use higher rates in the range 2.4 to 3.2L/ha. For dense swards or spring application use rates in the range 2.4 to 3.2L/ha.</p> <p>* For control of Vulpia (Silver Grass) add a wetter such as Agral at 160mL/100L or TITAN Wetter 1000 Wetting Agent at 100mL/100L.</p> <p><b>Also refer to Crop Establishment Procedure (3) – Cultivation after spraying.</b> Cultivation can commence 30 minutes after spraying but should be completed within 7 days unless a suitable residual herbicide is added. Where heavy weed growth is present at spraying a better seed bed will result if cultivation is delayed 3 to 5 days.</p> <p><b>Also refer to Crop Establishment Procedure (4) – Cultivation before spraying.</b> Spraying may be carried out before or after sowing, but 3 days before the crop emerges.</p> <p><b>Tank Mix:</b> See Compatibility Section. Refer to partner product labels for suitability of use prior to sowing particular crops and relevant plantback periods.</p>
		4 leaf to early tiller	1.2 to 2.4		
		Mid to fully tillered	2.4 to 3.2		
		2 to 3 leaf	1 to 1.2*		
		4 leaf to early tiller	1.2 to 2.4*		
		Mid to fully tillered	2.4 to 3.2*		
		1 to 5cm dia	1.2 to 1.8		
		5 to 10cm dia	1.8 to 2.4		
		10 to 20cm dia	2.4 to 3.2		
		1 to 4 leaf or 1 to 4cm dia	1.2 to 1.8		
		4 to 8 leaf or 4 to 8cm dia	1.8 to 3.2		
		1 to 10 leaf or 1 to 10cm dia	1.2 to 3.2		
		1 to 5 leaf	1.8 to 3.2		
		1 to 4 leaf	1.2 to 3.2		
		1 to 12 leaf	1.2 to 1.8 plus TITAN Oxyfluorfen 240 EC 75mL		
		1 to 6 leaf	1.2 to 1.8 plus TITAN Metsulfuron 600 WG 5g or 1.2 to 1.8 plus TITAN Dicamba 500 500mL		
		1 to 4 leaf or 1 to 4cm dia	1.2 to 1.8 plus 500mL/ha Banvel 200		
		4 to 8 leaf or 4 to 8cm dia	1.8 to 3.2 plus TITAN Metsulfuron 600 WG 5g		

SOUTHERN AUSTRALIA – FALLOW / MINIMUM DISTURBANCE – continued						
CROP / SITUATION	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS	
<b>SOUTHERN AUSTRALIA</b> <b>DIRECT DRILLING</b> With minimum disturbance (disc drill, modified combine, sod seeder) or <b>FALLOWS</b> Cultivated or non-cultivated as an aid in establishing crops or Establishing and maintaining a fallow. Includes the following crops: <b>Winter</b> Canola, Chickpeas, Cereals (Wheat, Barley, Oats, Rye, Triticale), Field Beans, Field Peas, Lentils, Linseed (Linola), Lupins, Vetch <b>Spring / Summer</b> Fodder Rape, Pigeon Peas, Safflower, Sorghum, Soybeans, Sunflower <b>PASTURE</b> Clover Grass, Lucerne, Medic – continued	<b>Split application for:</b> Sub-clover ( <i>Trifolium subterraneum</i> )	1 to 8 leaf or 1 to 8cm dia	1.2 followed by 1.2	ALL STATES	For Sub-clover control without the addition of Banvel 200 in crops sown with triple disc, modified combine or sod seeder use a split application. Apply second application 7 to 15 days after first application and when green regrowth is present.  For control prior to sowing with combine use a split application. Apply first application in autumn to mid winter. Apply second application 7 to 15 days later and when green regrowth is present. Apply first application in late winter and follow with second application 7 to 15 days later when green regrowth is present. If there is excess leaf growth, ie more than 10cm, split the recommended rate in half and apply second part 7 to 15 days after the first. Paddocks should be well grazed continuously from the break. The first application removes excess leaf growth, the second application is effective on residual green tissue. Green growth must be present for second application.	
	Perennial Ryegrass ( <i>Lolium perenne</i> )	4 leaf to early tiller	1.2 followed by 1.2			
		Mid to fully tillered	1.6 followed by 1.6			
	Most annual weeds	Weeds higher than 10cm	2.4 to 3.2			
	Potato Weed ( <i>Heliotropium europaeum</i> )	1 to 15cm 15 to 30cm	1.2 to 1.6 1.6 to 2.4	SA only	For use in summer fallows only.  Add 275g/ha TITAN Diuron 900 WG Herbicide to enhance control of larger weeds.	
NORTHERN AUSTRALIA – FULL DISTURBANCE						
CROP / SITUATION	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS	
<b>NORTHERN AUSTRALIA</b> <b>DIRECT DRILLING</b> With full combine as an aid in the establishment of crops including: <b>Broadacre crops – Winter</b> Cereals (Wheat, Barley, Oats, Rye, Triticale), Canola, Chickpeas, Field Beans <b>Broadacre crops – Summer</b> Cotton, Maize, Millet, Mungbeans, Navy Beans, Peanuts, Pigeon Peas, Safflower, Sorghum, Soybeans, Sunflower	<b>Seedling grasses (not regrowth or rhizomes)</b> Barnyard Grass ( <i>Echinochloa</i> spp.), Buffel Grass ( <i>Cenchrus ciliaris</i> ), Columbus Grass ( <i>Sorghum x almum</i> ), Johnson Grass ( <i>Sorghum halepense</i> ), Liverseed Grass ( <i>Urochloa panicoides</i> ), Mossman River Grass ( <i>Cenchrus echinatus</i> ), Paradoxa Grass ( <i>Phalaris paradoxa</i> ), Rhodes Grass ( <i>Chloris gayana</i> ), Summer Grass ( <i>Digitaria ciliaris</i> ), Sweet Summer Grass ( <i>Brachiaria eruciformis</i> ), Volunteer Barley ( <i>Hordeum vulgare</i> ), Volunteer Wheat ( <i>Triticum aestivum</i> ), Wild Oats ( <i>Avena ludoviciana</i> , <i>A. fatua</i> )	2 to 3 leaf	0.8 to 1.2	QLD, Nthn NSW, NT only	<b>Refer to Crop Establishment Procedure (7a).</b> Apply in 50 to 100L of clean water/ha. Avoid spraying under hot dry conditions. Best results will be obtained when spraying is carried out in humid conditions or in the late evening. In a typical mixed weed situation use the rate recommended for the growth stage of the hardest-to-kill weed species. Rates shown are for optimum conditions and for sowing equipment with wide points and cultivating tynes. Under less favourable conditions or where spraying is delayed or where narrow points are fitted, use higher rates in the range 1.6 to 2.4L/ha.  <b>Tank Mix:</b> See Compatibility Section.  * For control of larger weeds prior to cereals add 0.5 to 1L 2,4-D Amine (500g/L). Refer to relevant label for plantback period.	
			4 leaf to early tiller			1.2 to 1.6
			Mid to fully tillered			1.6 to 2.4
	Sorghum ( <i>Sorghum bicolor</i> ), Stink Grass ( <i>Eragrostis cilianensis</i> )	2 to 3 leaf only	0.8 to 1.2			

NORTHERN AUSTRALIA – FULL DISTURBANCE – continued						
CROP / SITUATION	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS	
<b>NORTHERN AUSTRALIA</b> <b>DIRECT DRILLING</b> With full combine as an aid in the establishment of crops including: <b>Broadacre crops – Winter</b> Cereals (Wheat, Barley, Oats, Rye, Triticale), Canola, Chickpeas, Field Beans <b>Broadacre crops – Summer</b> Cotton, Maize, Millet, Mungbeans, Navy Beans, Peanuts, Pigeon Peas, Safflower, Sorghum, Soybeans, Sunflower – continued	<b>Seedling broadleaved weeds</b> African Turnip Weed ( <i>Sisymbrium thellungii</i> )*, Annual Saltbush ( <i>Atriplex muelleri</i> ), Australian Bindweed ( <i>Convolvulus erubescens</i> ), Australian Bluebell ( <i>Wahlenbergia gracilis</i> ), Blackberry Nightshade ( <i>Solanum nigrum</i> ), Bathurst Burr ( <i>Xanthium spinosum</i> ), Bellvine ( <i>Ipomoea plebeia</i> ), Black Pigweed ( <i>Trianthema portulacastrum</i> ), Bladder Ketmia ( <i>Hibiscus trionum</i> ), Caltrop ( <i>Tribulus terrestris</i> ), Caustic Weed ( <i>Euphorbia</i> spp.), Climbing Buckwheat ( <i>Polygonum convolvulus</i> ), Cowvine ( <i>Ipomoea lonchophyla</i> ), Cudweeds ( <i>Gnaphalium</i> spp.), Deadnettle ( <i>Lamium amplexicaule</i> ), European Bindweed ( <i>Convolvulus arvensis</i> ), Fat Hen ( <i>Chenopodium album</i> ), Fireweed ( <i>Senecio madagascariensis</i> ), Fleabanes ( <i>Conyza</i> spp.), Fumitory ( <i>Fumaria</i> spp.), Hogweed ( <i>Zaleya galericulata</i> ), Malvastrum ( <i>Malvastrum americanum</i> ), Mexican Poppy ( <i>Argemone</i> spp.), Mintweed ( <i>Salvia reflexa</i> ), Mungbean ( <i>Vigna radiata</i> ), Native Rosella ( <i>Abelmoschus ficulneus</i> ), New Zealand Spinach ( <i>Tetragonia tetragonioides</i> ), Noogora Burr ( <i>Xanthium pungens</i> ), Parthenium Weed ( <i>Parthenium hysterophorus</i> ), Peppergrass ( <i>Lepidium</i> spp.), Phyllanthus ( <i>Phyllanthus</i> spp.), Prickly Lettuce ( <i>Lactuca seriola</i> ), Prickly Paddy Melon ( <i>Cucumis myriocarpa</i> ), Red Pigweed ( <i>Portulaca oleracea</i> ), Rhynchosia ( <i>Rhynchosia</i> spp.), Sesbania Pea ( <i>Sesbania cannabina</i> )*, Sida ( <i>Sida</i> spp.), Smooth Cucumber ( <i>Cucumis</i> spp.), Soft Roly Poly ( <i>Salsola kal</i> ), Sowthistle ( <i>Sonchus</i> spp.), Soybean ( <i>Glycine max</i> ), Spiny Emex ( <i>Emex australis</i> ), Sunflower ( <i>Helianthus annuus</i> )*, Thornapples ( <i>Datura</i> spp.), Variegated Thistle ( <i>Silybum marianum</i> ), Wild Gooseberry ( <i>Physalis minima</i> )	1 to 4 leaf	0.8 to 1.6	QLD, Nthn NSW, NT only	<b>Refer to Crop Establishment Procedure (7a).</b> Apply in 50 to 100L of clean water/ha. Avoid spraying under hot dry conditions. Best results will be obtained when spraying is carried out in humid conditions or in the late evening. In a typical mixed weed situation use the rate recommended for the growth stage of the hardest-to-kill weed species. Rates shown are for optimum conditions and for sowing equipment with wide points and cultivating tynes. Under less favourable conditions or where spraying is delayed or where narrow points are fitted, use higher rates in the range 1.6 to 2.4L/ha. <b>Tank Mix:</b> See Compatibility Section. * For control of larger weeds prior to cereals add 0.5 to 1L 2,4-D Amine (500g/L). Refer to relevant label for plantback period.	
		4 to 8 leaf	1.6 to 2.4			
		8 to 12 leaf	2.4			
		Native Jute ( <i>Corchorus trilocularis</i> )	1 to 4 leaf			1.2 to 1.6
			4 to 8 leaf			1.6 to 2.4
Annual Ground Cherry ( <i>Physalis angulata</i> ), Turnip Weed ( <i>Rapistrum rugosum</i> )	1 to 4 leaf	1.2 to 1.6				
Boggabri ( <i>Amaranthus mitchellii</i> ), Hexham Scent ( <i>Melilotus indicus</i> )*, Wild Carrot ( <i>Daucus glochidiatus</i> ), Speedy Weed ( <i>Flaveria australasica</i> )	1 to 8 leaf	0.8 to 1.2				

SUGARCANE					
CROP	WEEDS CONTROLLED	GROWTH STAGE	RATE/ha	STATE	CRITICAL COMMENTS
<b>NORTHERN AUSTRALIA SUGARCANE ESTABLISHMENT AND FALLOWS PRIOR TO SUGARCANE PLANTING CULTIVATED OR NON-CULTIVATED</b> As an aid in establishing Sugarcane or controlling weeds in a Fallow prior to Sugarcane	<b>Seedling grasses (not regrowth or rhizomes)</b> Barnyard Grass ( <i>Echinochloa</i> spp.), Liverseed Grass ( <i>Urochloa panicoides</i> ), Stink Grass ( <i>Eragrostis ciliaris</i> )	2 leaf to pre-tillering	1.2 to 1.6	QLD, Nthn NSW, NT only	<b>Sugarcane:</b> Prior to planting or for establishing or maintaining a fallow – <b>Refer to Procedure (6)</b> and the following. <b>Cultivated Fallow:</b> Where seedling weeds have recently germinated, are growing well and are up to 10cm high use rates of 1.6 to 2.4L/ha in a spray volume of 150 to 200L water/ha plus a wetter such as TITAN Wetter 1000 Wetting Agent at 120mL/ha or Agral at 200mL/100L. <b>* Non-cultivated Fallow:</b> To control mature dense stands of annual weeds use rates of 2.4 to 3.2L/ha in a spray volume of 400L water /ha plus a wetter such as TITAN Wetter 1000 Wetting Agent at 120mL/100L or Agral at 200mL/100L. Control will be improved with the addition of an enhancement rate of TITAN Diuron WG Herbicide (500g to 1kg/ha) and if vines are present add 2,4-D amine. A split application of TITAN EOS Herbicide, 10 to 12 days apart will also improve control of tall dense weeds.  When dense weed growth is present implement penetration and the resulting seedbed may be improved if cultivation commences 4 to 5 days after spraying. Best results will be obtained when spraying is carried out in the evening or in humid conditions.  <b>Tank Mix:</b> See Compatibility Section.
		Early tillering	1.6 to 2.4		
	<b>Seedling broadleaved weeds</b> Bathurst Burr ( <i>Xanthium spinosum</i> ), Bellvine ( <i>Ipomoea plebeia</i> ), Black Pigweed ( <i>Trianthema portulacastrum</i> ), Bladder Ketmia ( <i>Hibiscus trionum</i> ), Caltrop ( <i>Tribulus terrestris</i> ), Fat Hen ( <i>Chenopodium album</i> ), Fumitory ( <i>Fumaria</i> spp.), Mintweed ( <i>Salvia reflexa</i> ), Mungbean ( <i>Vigna radiata</i> ), New Zealand Spinach ( <i>Tetragonia tetragonoides</i> ), Prickly Paddy Melon ( <i>Cucumis myriocarpa</i> ), Sesbania Pea ( <i>Sesbania cannabina</i> ), Smooth Cucumber ( <i>Cucumis</i> spp.), Thornapples ( <i>Datura</i> spp.), Wild Gooseberry ( <i>Physalis minima</i> )	1 to 4 leaf	1.6 to 2.4		
		Mature annual grasses*	2.4 to 3.2*		
Phyllanthus ( <i>Phyllanthus</i> spp.)	1 to 8 leaf	1.6 to 2.4			
	Mature broadleaf weeds*	2.4 to 3.2*			

**NORTHERN AUSTRALIA – FALLOW/MINIMUM DISTURBANCE**

CROP	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS
<b>NORTHERN AUSTRALIA DIRECT DRILLING</b> With minimum disturbance or <b>FALLOWS</b> Cultivated or non-cultivated as an aid in establishing or maintaining a fallow or the establishment of crops including: <b>Broadacre crops – Winter</b> Cereals (Wheat, Barley, Oats, Rye, Triticale), Chickpeas <b>Broadacre crops – Summer</b> Cotton, Maize, Millet, Mungbeans, Safflower, Sorghum, Soybeans, Sunflower	<b>Seedling grasses (not regrowth or rhizomes)</b> Barnyard Grass ( <i>Echinochloa</i> spp.), Liverseed Grass ( <i>Urochloa panicoides</i> ), Paradoxa Grass ( <i>Phalaris paradoxa</i> ), Stink Grass ( <i>Eragrostis ciliaris</i> ), Volunteer Barley ( <i>Hordeum vulgare</i> ), Volunteer Wheat ( <i>Triticum aestivum</i> ), Wild Oats ( <i>Avena ludoviciana</i> , <i>A. fatua</i> )	2 leaf to pre-tillering	1.2 to 1.6	QLD, Nthn NSW, NT only	<b>Refer to Procedures (5), (6) or (7b).</b> As appropriate to the particular situation In a typical mixed weed situation use the rate recommended for the growth stage of the hardest-to-kill weed species. Rates shown are for optimum conditions and for row crop or no-till planters. Under less favourable conditions or where spraying is delayed or for fallow weed control use higher rates in the range 1.6 to 2.4L/ha. Apply in 50 to 100L of clean water/ha. Avoid spraying under hot dry conditions. Best results will be obtained when spraying is carried out in the evening or in humid conditions. * For control of larger weeds prior to cereals add 0.5 to 1L 2,4-D amine (500g/L) – refer to relevant label for plantback period. <b>Tank Mix:</b> See Compatibility Section.
		Early tillering	1.6 to 2.4		
	<b>Seedling broadleaved weeds</b> Bathurst Burr ( <i>Xanthium spinosum</i> ), Bellvine ( <i>Ipomoea plebeia</i> ), Black Pigweed ( <i>Trianthema portulacastrum</i> ), Bladder Ketmia ( <i>Hibiscus trionum</i> ), Caltrop ( <i>Tribulus terrestris</i> ), Fat Hen ( <i>Chenopodium album</i> ), Fireweed ( <i>Senecio madagascariensis</i> ), Fumitory ( <i>Fumaria</i> spp.), Mintweed ( <i>Salvia reflexa</i> ), Mungbean ( <i>Vigna radiata</i> )*, New Zealand Spinach ( <i>Tetragonia tetragonoides</i> ), Prickly Paddy Melon ( <i>Cucumis myriocarpa</i> ), Sesbania Pea ( <i>Sesbania cannabina</i> )*, Smooth Cucumber ( <i>Cucumis</i> spp.), Sunflower ( <i>Helianthus annuus</i> )*, Thornapples ( <i>Datura</i> spp.), Wild Gooseberry ( <i>Physalis minima</i> )	1 to 4 leaf	1.6 to 2.4		
Boggabri ( <i>Amaranthus mitchellii</i> ), Hexham Scent ( <i>Melilotus indicus</i> )*, Wild Carrot ( <i>Daucus glochidiatus</i> ), Phyllanthus ( <i>Phyllanthus</i> spp.)		1 to 8 leaf	1.6 to 2.4		

NORTHERN AUSTRALIA – FALLOW/MINIMUM DISTURBANCE – continued					
CROP	WEEDS CONTROLLED	GROWTH STAGE	RATE L/ha	STATE	CRITICAL COMMENTS
As an aid in post harvest weed control – after winter cereals	Volunteer Barley ( <i>Hordeum vulgare</i> ), Volunteer Wheat ( <i>Triticum aestivum</i> ), Bladder Ketmia ( <i>Hibiscus trionum</i> ), Milk Thistle ( <i>Sonchus oleraceus</i> ), New Zealand Spinach ( <i>Tetragonia tetragonoides</i> )	1 to 4 leaf	1.6 to 2.4	QLD, Nthn NSW, NT only	<b>Refer to Procedure 5.</b> DO NOT spray under hot, dry conditions or when weeds are covered with dust and/or trash. Application is best carried out following rain.
<b>SUGARCANE PLANT &amp; RATOON</b>	Most seedling broadleaf weeds including Sicklepod ( <i>Senna (Cassia) obtusifolia</i> ), Bluetop ( <i>Ageratum houstonianum</i> ), Phyllanthus ( <i>Phyllanthus</i> spp.), Calopo ( <i>Calapogonium muconoides</i> )  And most seedling grasses including Awnless Barnyard Grass ( <i>Echinochloa colona</i> ), Summer Grass ( <i>Digitaria ciliaris</i> ), Guinea Grass ( <i>Panicum maximum</i> ), Hamil Grass ( <i>Panicum maximum cv Hamil</i> ), Green Summer Grass ( <i>Brachiaria miliiformis</i> )  All above grasses  All above grasses	Up to 5cm high	1.2 to 1.6	QLD, NSW, WA only	Apply as a broadcast spray over-the-top of plant cane up to the 3 to 4 leaf stage or ratoon cane up to 10cm high. Cane foliage will be scorched but new leaves will appear in 7 to 10 days. In plant cane between the 3 to 4 leaf stage and the formation of the true stem use a directed interspace spray. The Irvin spray boom is the most suitable equipment to avoid excessive drift onto cane foliage while spraying at the bases of plant and ratoon cane. After the formation of the true stem which is resistant to TITAN EOS Herbicide, the sprayer height can be raised to overlap the spray pattern to give weed control in the stool. Use the higher rate for dense, more mature weeds. TITAN EOS Herbicide can be mixed with TITAN Atrazine 900 WG Herbicide to give residual weed control when used as a directed spray. It may also be mixed with high rates of TITAN Diuron 900 WG Herbicide for residual control. To enhance activity of TITAN EOS Herbicide under favourable growing conditions and in open sunny conditions add 275g/ha TITAN Diuron 900 WG Herbicide. Complete spray coverage is essential.  For grasses and broadleaved weeds up to 5cm high use a minimum of 250L spray solution/ha, increase to 350L/ha for weeds up to 10cm high.  Use a spray volume of 400L/ha for dense mature weeds. Always add a wetter such as Agral at 200mL/100L or TITAN Wetter 1000 Wetting Agent at 120mL per 100L of water.
		Up to 50cm high			
		Up to 15cm high			
		3 to 5 leaves	1.6 to 2.0		
		Up to 5cm high	1.2 to 1.6 plus 500g TITAN Diuron 900 WG		
		Up to 10cm high	1.2 to 1.6 plus 1kg TITAN Diuron 900 WG		
		>10 cm high and seeding	1.6 plus 2.8 to 3.9kg TITAN Diuron 900 WG		

**COTTON**

CROP / SITUATION	USE	RATE L/ha	STATE	CRITICAL COMMENTS
<b>COTTON</b> Dryland and moisture stressed	Desiccant to aid harvest	1.2 to 1.6	QLD, NSW only	Apply by groundrig only. Good spray coverage is essential. Apply in 50 to 100L water/ha. Use 5 hollow cone or 3 flat fan nozzles per row. Apply when at least 85% of bolls are open and remaining bolls are mature. TITAN EOS Herbicide can damage immature green bolls.

**LUCERNE**

CROP / SITUATION	WEEDS CONTROLLED	RATE L/ha	STATE	CRITICAL COMMENTS
<b>LUCERNE</b> Established (at least 1 year old) – for improved grazing or oversowing – for improved grazing, hay or seed production or oversowing – for enhanced control of some broadleaf weeds – for short term residual weed control	Most annual weeds including Capeweed and Erodium	1.6	ALL STATES	Spray in autumn after weeds germinate. Graze the Lucerne to reduce the height to 2 to 4cm before spraying. <b>Note:</b> If required, grass, clover or lucerne seed can be direct drilled to increase desirable plant population.
		2.4		Spray in winter. Graze the Lucerne to reduce the height to 2 to 4cm before spraying. <b>Note:</b> If required, grass, clover or lucerne seed can be direct drilled to increase desirable plant population.
	As above plus Paterson's Curse and Shepherd's Purse	2.4 plus TITAN Diuron 900 WG 1kg		For improved control of Paterson's Curse and Shepherd's Purse mix with TITAN Diuron 900 WG Herbicide at 1kg/ha in late winter. <b>DO NOT</b> use the tank mix if oversowing.



LUCERNE – continued					
CROP / SITUATION	WEEDS CONTROLLED	RATE L/ha	STATE	CRITICAL COMMENTS	
<b>LUCERNE</b> Established (at least 1 year old) – for improved grazing or oversowing – for improved grazing, hay or seed production or oversowing – for enhanced control of some broadleaf weeds – for short term residual weed control	Most annual weeds including Capeweed, Erodium, Paterson's Curse and Shepherd's Purse	2.4 plus TITAN Diuron 900 WG 1kg	ALL STATES	For short term residual control, tank mix with TITAN Diuron 900 WG Herbicide at 1.9kg/ha in late winter. Length of control may be shorter on heavy soils or under irrigation. DO NOT use the tank mix if oversowing. <b>Warning:</b> Continued use of TITAN EOS Herbicide alone in certain areas, has resulted in the selection of resistant Barley Grass ( <i>Hordeum glaucum</i> , <i>H. leporinum</i> ), Capeweed and Silver Grass ( <i>Vulpia</i> spp). Where resistant Barley Grass is confirmed it may be controlled with Fusilade or Fusion. The use of the tank mix with TITAN Diuron 900 WG Herbicide will assist in control of resistant Capeweed and Silver Grass and is recommended as a general weed resistance strategy for Lucerne.	
PUBLIC SERVICE AREAS, TROPICAL TREE CROPS, VEGETABLES, POTATOES, ORCHARDS AND VINEYARDS					
CROP SITUATION	WEEDS CONTROLLED	RATE/ha		STATE	CRITICAL COMMENTS
		High volume or power sprayer			
		/ha	/100L (spot spray)		
Public Service Areas, Rights-of-Way, Market Gardens, Nurseries, Orchards (including Bananas), Vineyards Forests – ring weeding around trees with brown bark and strip spraying in orchards and vineyards	Most annual grasses and broadleaved weeds	2.4 to 3.2L (a) see below	240 to 320mL (b) see below	ALL STATES	Thoroughly wet plant foliage. Use the high rate for dense more established weed growth. Repeat treatment on regenerated green perennial weeds (such as Paspalum and Docks) while plants are weakened from previous treatment. Addition of TITAN Oxyfluorfen 240 EC Herbicide at 250mL/ha will improve control of Small Flowered Mallow, Evening Primrose and other weeds sensitive to TITAN Oxyfluorfen 240 EC Herbicide. Refer to the TITAN Oxyfluorfen 240 EC Herbicide label. <b>Note:</b> Spot Spray rate assumes 1000L water/ha. For lower water volumes increase dilution rate as below: - water volume 250L/ha: use 960 to 1280mL/100L - water volume 500L/ha: use 480 to 640mL/100L - water volume 750L/ha: use 320 to 430mL/100L <b>OR</b> Measure how much spray is required to cover an area of 100 square metres using your normal application volume. Your dilution rate is 24 to 32mL of TITAN EOS Herbicide in this volume.
Pre-crop emergence weed control (vegetable crops)					Prepare seed bed as long as possible before sowing to permit maximum weed germination. Spray the weeds, wait until they have dried off and then sow. If further weed germinations occur before crop emerges, spray again but at least 3 days before crop emerges. Spray when weeds are growing vigorously and not covered with soil or dust, or wilting due to dry conditions. When rain follows dry conditions allow 7 days for weed growth to commence before spray application. See <b>Note</b> on Spot Spray rate above.
Long term weed control					TITAN EOS Herbicide can be mixed with soil residual herbicides TITAN Diuron 900 WG Herbicide, TITAN Atrazine 900 WG Herbicide, TITAN Simazine 900 WG Herbicide. (For further information see General Instructions).



**PUBLIC SERVICE AREAS, TROPICAL TREE CROPS, VEGETABLES, POTATOES, ORCHARDS AND VINEYARDS – continued**

CROP SITUATION	WEEDS CONTROLLED	RATE/ha		STATE	CRITICAL COMMENTS
		High volume or power sprayer			
		/ha	/100L (spot spray)		
Potatoes – weed control  – weed destruction prior to digging	Most annual grasses and broadleaved weeds	2.4 to 3.2L (a) see below	240 to 320mL (b) see below	ALL STATES	After planting and hilling up, wait until 10 to 25% of Potato shoots are emerged then blanket spray with TITAN EOS Herbicide. Emerged Potato shoots will suffer a marginal leaf burn but will quickly recover. See <b>Note</b> on Spot Spray rate above.
		3.2L (a) see below	320mL (b) see below		Spray 3 to 7 days before digging after all tops have died down. See <b>Note</b> on Spot Spray rate above. <b>Note:</b> DO NOT use TITAN EOS Herbicide for Potato haulm desiccation.
Avocados, Custard Apples, Lychees, Mangoes	Most annual and perennial broadleaf weeds and grasses	–	120 to 240mL (b) see below		Apply to the ground cover underneath trees from summer to autumn prior to harvest. A second spray may be required 14 days later to control growth not controlled by the initial spray. See <b>Note</b> on Spot Spray rate above. <b>Warning:</b> Avoid spray drift onto trees.

**Wetting agent:**

(a) If volume of water applied exceeds 200L/ha add 200mL Agral or 120mL TITAN Wetter 1000 Wetting Agent/100L of additional water.

(b) Add 160mL Agral or 100mL TITAN Wetter 1000 Wetting Agent/100L.

CROP / SITUATION	SITUATION/WEEDS	STATES	RATE L/ha	CRITICAL COMMENTS
Rice DO NOT apply if rice has emerged	Annual weeds	NSW only	1.6 to 3.2	<b>Refer to Direct Drilling Procedure – Rice (2).</b>
	Annual weeds including Barnyard Grass		1.7 to 2.2	On rice stubbles after burning.
	Clover control		2.2L plus 500mL Banvel 200 as tank mix	Well grazed Clover dominant pastures.
	Annual pasture		3.2	Pasture not properly managed. Use 100L/ha water/2cm growth.
Kikuyu/Paspalum Pastures	To suppress growth to over sow winter feed		2.4	Spray in autumn after grazing or slashing to 2 to 4cm.
			3.2	For early spraying (February or March) or if lightly grazed.
Established Pastures Perennial Grass Crops, Cocksfoot, Perennial Ryegrass, Phalaris, Demeter Fescue	Control of annual weeds including Capeweed and Erodium for improved grazing, hay or seed production	NSW, VIC, TAS, SA, WA only	1.6	Spray in autumn (4 weeks after the break) to mid winter. Only spray stands which are at least 12 months old. Graze pastures to maintain length between 2 to 4cm. (Sub-clover should be past 6 true leaf stage).
			2.4	Spray in late winter. Only spray stands which are at least 12 months old. Continuously graze pasture to maintain length 2 to 4cm.
Pasture Improvement	To increase the Perennial Grass and/or the Sub-clover or White Clover content of the pasture		1.2	Spray in winter. Sub-clover should be past 6 true leaf stage. Only suppresses annual weeds. (ALL STATES except WA) and perennial weeds (WA).
Grasses (particularly Annual Ryegrass)	To control Grass Seed set (Spray Top technique)	SA, WA only	<b>Boom:</b> 800mL/ha in a minimum of 50L clean water	Apply at the end of growing season. HEAVILY GRAZE paddocks during the spring flush period to prevent early seed heads emerging. REMOVE all stock about 3 weeks before the end of the growing season to allow seed heads to emerge evenly. Set boom spray at a height to give double overlap spray pattern AT THE TOP of the pasture being sprayed.
			1.5	HAY FREEZING for maximum retention of protein for summer grazing.
Duboisia	Annual weeds	QLD, NT only	2.4 to 3.2L/ha OR Spot Spraying 240 to 320mL/100L	Apply as directed spray on to weeds around Duboisia plants. This treatment is most effective when applied to young weed seedlings. Product may be mixed with simazine or diuron or applied alone. Thoroughly wet foliage. It is essential to obtain good leaf/coverage and spray volumes of 50 to 200L/ha are recommended, depending on density of weed cover. Refer to General Instructions for addition of wetter.
Tea-trees ( <i>Melaleuca alternifolia</i> )	Grasses and broadleaf weeds	NSW only	1.6 to 3.2	Apply immediately after harvest to desiccated weeds. Avoid drift to unharvested areas.

PRE-HARVEST CROP DESICCATION			
SITUATION	USE	RATE	CRITICAL COMMENTS
Pulses (Chickpeas, Faba Beans, Lentils, Lupins only)	Pre-harvest application as a crop desiccant and knockdown weed control	1.5L/ha	Spray as soon as the crop has reached full maturity. This product helps overcome slow and uneven ripening and weed problems at harvest.
	Spray topping to reduce seed set of Annual Ryegrass	1.5L/ha	As an aid in managing Annual Ryegrass resistance. For use on escapes from a previous herbicide application in the current crop. Spray the crop when the Ryegrass is at the optimum stage, that is when the last Ryegrass seed heads at the bottom of the plant have emerged and the majority are at or just past flowering (with anthers present or glumes open) but before haying off is evident. Reduction in crop yield may occur especially if the crop is less advanced relative to the Ryegrass, that is if crops have a majority of green immature pods. Apply by ground boom only in 50 to 100L/ha. Spray with a calibrated boom spray raised to give double overlap at the level of the Ryegrass seed heads.

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

**FOR USE ONLY AS AN AGRICULTURAL HERBICIDE. THIS PRODUCT IS TOO HAZARDOUS TO BE USED IN THE HOME GARDEN.**

**WITHHOLDING PERIODS:**

**DO NOT GRAZE OR CUT SPRAYED VEGETATION FOR STOCK FOOD FOR AT LEAST 1 DAY OR GRAZE HORSES FOR 7 DAYS AFTER APPLICATION.**

**REMOVE STOCK FROM TREATED AREAS 3 DAYS BEFORE SLAUGHTER.**

**Cotton: DO NOT HARVEST EARLIER THAN 7 DAYS AFTER APPLICATION.**

**GENERAL INSTRUCTIONS**

TITAN EOS Herbicide quickly kills a wide range of annual grasses, broadleaf weeds and some perennial grasses when sprayed directly onto the leaves. The active ingredients are rapidly and tightly absorbed by clay and silt particles in the soil and do not leave any effective soil residues. Thus crops sown almost immediately after spraying are not affected by the chemicals, not are weed seeds which germinate after spraying.

Where insect pests are anticipated use recommended insecticide treatment. Regular checks should be made before and after sowing.

Suitable residual herbicides can be tank mixed with TITAN EOS Herbicide to provide extended in-crop weed control in fallows and subsequent crops. Read label recommendations of the respective residual herbicides prior to their use and observe precautions against use of residual herbicides before planting susceptible crops. See compatibility statement on this label for compatibility of TITAN EOS Herbicide with other herbicides.

**MIXING**

The recommended rate of TITAN EOS Herbicide should be added to water in the spray tank and agitated to give even mixing. Agitate again if left standing.

**Water Volume**

It is essential to obtain good leaf coverage with the spray and the following volumes are recommended:

Winter rainfall areas	Boom Spray	Summer rainfall areas: Weed stage and density
Plant height up to 2cm	50 to 100L/ha	Small plants (2 to 5 leaf) and well separated.
Plant height up to 2 to 5cm	100 to 150L/ha	5 leaf to early tiller/rosette; 30 to 50% ground cover.
Plant height up to 6 to 10cm	150 to 200L/ha	Advanced growth, dense and/or tall weed stands.
Above 10cm	Use split application to remove excess growth. Use 150L/ha.	Very dense and tall weed growth.

**Note:**

- If the volume is increased above 100L/ha additional wetter should be added at the rate of 200mL of Agral/100L or 120mL TITAN Wetter 1000 Wetting Agent/100L of additional water.
- Water should be clean and free from clay, silt and algae. Providing it meets this requirement, saline water, water collected from roofs, bore water, dam water and water from creeks may be used.

**APPLICATION**

**Boom Spray**

Use only through a properly calibrated boom spray which should be fitted with flat fan jets and adjusted to a height to give at least double overlap of the spray at the top of the weeds being sprayed. Spraying pressures should be in the range of 240 to 280kPa. Speed of travel should be in the range of 6 to 10 km/hr. It is essential that a good marking system be used. If a disc marker is used it must be mounted so as to turn the soil back on to the area sprayed.

(1) DIRECT DRILLING PROCEDURE – Use of TITAN EOS Herbicide in crop establishment with no working before sowing	
Step	Critical Comments
1. Burn	If possible, crop stubble or pasture trash should be burnt early to avoid problems at sowing. Can also promote weed seed germination.
2. Shallow cultivation optional	Should be carried out on opening rains to a depth of no more than 2cm. This will encourage early even germination of weeds particularly annual grasses.
3. Heavily graze paddocks continuously from germination	This prepares the paddock for spraying by keeping the pasture short and open and at the same time restricts the development of the weed roots which will assist seed bed formation.
4. Remove stock 2 to 3 days before spraying	Allow the weeds to freshen up – important for maximum uptake of TITAN EOS Herbicide. Spraying can, however, take place immediately after stock removal provided there is sufficient leaf cover and the pasture is not dusty.
5. Spraying with a boom spray	Accurate application and full spray cover are essential to give weed control. Note limitations as outlined under Directions For Use.
6. Sow 3 to 5 days after spraying	A rigid tyne spring release combine is preferred to ensure adequate penetration. Points should not be worn. The combine must be level and set to work 3 to 5cm and sow seed at recommended depth. Use standard seed and fertiliser rates. When harrowing is considered necessary use trailing harrows. Sowing can commence one hour after spraying and should be completed within 7 days. Where heavy weed growth is present a better seed bed will result if sowing is delayed for 3 to 5 days.



<b>(2) DIRECT DRILLING (SOD SEEDING) PROCEDURE – RICE</b>	
<b>Step</b>	<b>Critical Comments</b>
1. Graze pasture heavily	Allow pasture to green up before spraying, generally about 1 week. Watering may be required. Where Rice follows a cereal crop, the stubbles should be burnt well in advance of the anticipated date of sowing to allow weeds to germinate prior to spraying.
2. Spray the paddock before or after direct drilling	Use 1.6 to 3.2L TITAN EOS Herbicide/ha. Use 1.7 to 2.2L/ha for weeds, particularly Barnyard Grass, on Rice stubbles after burning. Use 2.2L/ha for well grazed pastures plus 500mL Banvel* 300/ha as a tank mix for Clover dominant pastures. Up to 3.2L/ha may be required where the pasture has not been properly managed prior to spraying. Use approximately 100L clean water/ha/cm growth.
3. Direct drill rice	Drill at 2 to 3cm depth within a few hours of spraying. DO NOT delay for more than a few days after spraying. Spraying may be carried out after drilling.
<b>(3) CROP ESTABLISHMENT WITH A CULTIVATION AFTER SPRAYING – CROP ESTABLISHMENT PROCEDURE</b>	
<b>Step</b>	<b>Critical Comments</b>
1. Graze paddocks continuously from germination	This prepares the paddock for spraying by keeping the pasture short and open and at the same time restricts the development of the weed roots, which will assist seed bed formation.
2. Remove stock 2 to 3 days before spraying	Allows the weeds to freshen up – important for maximum uptake of TITAN EOS Herbicide. Spraying can take place immediately after stock removal provided there is sufficient leaf cover and the pasture is not dusty.
3. Spray with a boom spray	Accurate application and full spray cover are essential to give weed control. Note limitations as outlined under Directions For Use.
4. Cultivate	Between 1 hour and 7 days after spraying. When dense weed growth is present, implement penetration and resulting seed bed may be improved if cultivation commences 3 to 5 days after spraying. It is not necessary to cultivate deeper than sowing depth. Use scarifier or combine with heavy harrows.
5. Sow	Sow at the recommended seed and fertiliser rates and depth.
<b>(4) CROP ESTABLISHMENT WITH A CULTIVATION BEFORE SPRAYING – CROP ESTABLISHMENT PROCEDURE</b>	
<b>Step</b>	<b>Critical Comments</b>
1. Graze	Graze pasture or stubble to keep growth of weeds down to a minimum following the autumn break.
2. Cultivate 4 to 6 weeks prior to the anticipated sowing date	Cultivate after autumn rains when conditions are suitable to produce a seed bed and before heavy weed growth develops. A scarifier and heavy harrows should be used with the aim of killing existing weed growth and leaving the seed bed in a level condition. It is not necessary to cultivate deeper than the sowing depth.
3. Wait	Wait 4 to 6 weeks to allow a full germination of weeds. Graze if necessary.
4. Remove stock 2 to 3 days before spraying	Allow the weeds to freshen up – important for maximum uptake of TITAN EOS Herbicide.
5. Spray with a boom spray	Accurate application and full spray cover are essential to give weed control. Note limitations as outlined under Directions For Use.
6. Sow	Between 1 hour and 7 days after spraying, sow crop in the normal manner. Sow at recommended seed and fertiliser rates and depth. <b>Note:</b> Where heavy weed growth is present at spraying, a better seed bed will result if sowing is delayed for 3 to 5 days.

**Note:** For on the farm advice and assistance, contact your dealer or TITAN AG.

## **CONTROL OF WEEDS AFTER CROP HARVEST AND IN CULTIVATED AND NON-CULTIVATED FALLOW – NORTHERN NEW SOUTH WALES AND QUEENSLAND ONLY**

### **(5) USE OF TITAN EOS HERBICIDE FOR WEED CONTROL AFTER CEREAL HARVEST PROCEDURE**

New Zealand Spinach, Bladder Ketmia and Milk Thistle are often present after cereal harvest. They can be controlled by the application of 1.6 to 2.4L/ha of TITAN EOS Herbicide in at least 100L of clean water. Use a properly calibrated boom sprayer. Ensure that the boom is set for double overlap at the top of the weed canopy. The weed species must be free from dust and actively growing. They should not be shielded from the spray by stubble or trash. The use of a straw spreader at harvest is recommended.

### **(6) USE OF TITAN EOS FOR THE CONTROL OF WEEDS DURING THE FALLOW PROCEDURE**

Weeds must be controlled during the fallow to conserve moisture. While cultivation can eliminate weeds it also exposes the soil to moisture loss. In addition, repeated cultivations destroy soil structure, reduce organic matter and stubble cover. This leads to the formation of hard pans, soil crusts and increases the risk of erosion. Under moist soil conditions weeds are frequently transplanted and not killed, weed growth holds the soil in clods. TITAN EOS Herbicide provides an economical and reliable alternative for fallow weed control. For use in fallows to be planted to Sugarcane and for weed control prior to planting Sugarcane refer to the specific section of the label.

**a) Seedling weeds:** Seedling weeds should be sprayed with 1 to 3.2L/ha TITAN EOS Herbicide in 50 to 100L of clean water (see Directions For Use table). Some difficult to control weeds may require a second application 7 to 21 days later, or control may be assisted by a following cultivation.

**b) Advanced weed growth:** While some advanced weeds will be controlled by a single application of TITAN EOS Herbicide many species will require a follow-up cultivation to complete the kill. TITAN EOS Herbicide rapidly desiccates plant material and causes weed roots to loosen their grip on the soil. The results are improved incorporation of plant material, a reduced number of large clods and a more reliable weed kill even in moist soil. Use the recommended rates of TITAN EOS Herbicide in 100 to 200L of clean water.

**Control of transplanted weeds:** Weeds transplanted by unsuccessful cultivation present an extremely difficult problem. If there is a risk that cultivation will result in weeds being transplanted (particularly under moist soil conditions) it is recommended that the weeds be sprayed with TITAN EOS Herbicide prior to cultivation (see previous section).

Weeds partly covered by soil and clods provide poor conditions for successful chemical weed control. The best results will be achieved by allowing the weeds to make some regrowth to provide adequate chemical targets. Apply the highest rate of TITAN EOS Herbicide preferably spraying in the late afternoon or early evening.

### **(7) USE OF TITAN EOS HERBICIDE FOR THE CONTROL OF SEEDLING WEEDS IMMEDIATELY BEFORE SOWING PROCEDURE**

**a) Sowing with full disturbance (full combine):** The cultivation action of the combine aids in weed kill. Use 0.8 to 2.4L of TITAN EOS Herbicide depending upon weed species (see Directions For Use table). Sowing should commence within 7 days of spraying.

**b) Sowing with minimum disturbance (row crop, no-till planters):** A higher rate of TITAN EOS Herbicide is recommended due to the absence of cultivation. Use TITAN EOS Herbicide at 1 to 3.2L/ha in southern Australia; 1.2 to 3.2L/ha in northern Australia (QLD, ntnh NSW, NT only).

### **COMPATIBILITY**

TITAN EOS Herbicide is NOT compatible with copper, zinc or manganese sulphates. Mixtures with more than one product may not be compatible and should be checked in a jar test first. Physical compatibility does not guarantee biological compatibility. Tank mixes with 2,4-D and MCPA formulations should not be more concentrated than 2 parts TITAN EOS Herbicide to 1 part 2,4-D or MCPA. Refer to the manufacturers label for specific details on compatibility and weed control.

### **RESISTANT WEEDS WARNING**

TITAN EOS Herbicide is a member of the bipyrindyls group of herbicides. TITAN EOS

Herbicide has the inhibitors of photosynthesis at photosystem I mode of action. For weed resistance management TITAN EOS Herbicide is a Group 22 herbicide. Some naturally occurring weed biotypes resistant to TITAN EOS Herbicide and Group 22 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

**GROUP 22 HERBICIDE**



will not be controlled by TITAN EOS Herbicide or other Group 22 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 EOS Herbicide to control resistant weeds.

#### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions or from spraying equipment which may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

#### PROTECTION OF LIVESTOCK

Domestic pets and poultry – keep away from treated areas. Low hazard to bees. No special precautions are required. This formulation should not be applied on or near water which is used for livestock watering.

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

DO NOT contaminate streams, rivers or watercourses with the chemical or used containers. This formulation should not be applied on or near water which is used for human consumption, livestock watering or irrigation purposes or water used for commercial or recreational fishing.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated locked room or a place away from children, animals, food, feedstuffs, seed and fertilisers. 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.

**For Refillable Containers:** Store in the closed, original container in a dry, cool, well-ventilated locked room or a place away from children, animals, food, feedstuffs, seed and fertilisers. DO NOT store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

#### SAFETY DIRECTIONS

Very dangerous, particularly the concentrate. Product is poisonous if absorbed by skin contact, inhaled or swallowed. Will irritate the eyes, nose, throat and skin. Attacks eyes. Protect eyes while using. Avoid contact with eyes, skin and clothing. DO NOT inhale spray mist. When opening the container, preparing product for use and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length PVC gloves, face shield or goggles and half facepiece respirator or disposable respirator. If clothing becomes contaminated with product, or wet with spray, remove contaminated clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Avoid contact with spray mist. DO NOT inhale spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, respirator and if rubber (wash with detergent and warm water), face shield or goggles and contaminated clothing.

#### SPRAY APPLICATION

DO NOT work in spray mist. DO NOT continue to use if skin irritation or nose bleed occurs. This may be caused by exposure to spray mist as the result of incorrect use of equipment or adverse climatic conditions. Stop and review handling and spraying techniques before further spraying. If symptoms persist, seek medical advice. When there is a risk of exposure to spray mist wear waterproof footwear and waterproof protective clothing, impervious gauntlet length gloves (rubber or PVC), goggles and a face mask and respirator covering nose and mouth and capable of filtering spray droplets. A high efficiency type particulate respirator is recommended, but in any event use a respirator which complies with the requirement of AS1716 (Standards Association of Australia). Further advice on safety equipment should be obtained from a safety equipment manufacturer. Avoid contacting vegetation wet with spray, but if necessary to do so, wear waterproof footwear and waterproof protective clothing and gloves.

#### FIRST AID

If poisoning occurs, get to a doctor or hospital quickly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

**Note to Physicians:** For additional advice on the treatment of Paraquat poisoning please consult the booklet 'The Treatment of Paraquat Poisoning: A Guide for Doctors' available from TITAN AG Pty Ltd.

#### SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN EOS Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit 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: Harmful if swallowed. Fatal if inhaled. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects. Precautionary Statements: Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves / eye protection / face protection. [In case of inadequate ventilation] wear respiratory protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. Specific treatment is urgent (see on this label). Get medical advice/attention if you feel unwell. Rinse mouth. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local/regional/national regulations.

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