CAUTION

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

TITAN

CLOPYRALID 750SG
HERBICIDE

ACTIVE CONSTITUENT: 750g/kg CLOPYRALID present as the POTASSIUM SALT

GROUP **4** HERBICIDE



For the control of a wide range of broadleaf weeds in Wheat, Barley, Oats, Triticale, Canola, pastures, fallow land, forests and industrial/commercial situations as specified in the Directions For Use table.

APVMA Approval No.: 62537/130896

Pack Size: 2kg; 5kg

TITAN AG
CROP PROTECTION

TITAN AG Pty Ltd | ABN 57 122 081 574
15/16 Princes Street, Newport NSW 2106
Tel (02) 9999 6655 | titanag.com.au

SG Formulation Type **Water Soluble Granule**

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

9 **3077**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(contains clopyralid, potassium salt)
PG III Hazchem 2Z

DIRECTIONS FOR USE

Restraints:

DO NOT apply to weeds which may be stressed (inactive growth) due to prolonged periods of extreme heat or cold, moisture stress (water logging or drought) or previous herbicide treatment as reduced levels of control may result.

DO NOT apply immediately before sowing susceptible crops, or sow susceptible crops into paddocks treated the previous year with TITAN Clopyralid 750SG Herbicide until after the required plantback period has elapsed (see after the DIRECTIONS FOR USE TABLES section).

DO NOT apply this product by air or mister within a Chemical Control Area in Victoria without a valid permit.

DO NOT spray if rain is likely within 3 hours.

DO NOT apply later than the 8 leaf stage of canola or the 1st node stage of winter cereals.

DO NOT compost material from treated plants or crops before reading the PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS section.

See GENERAL INSTRUCTIONS – APPLICATION section for application method details.

IT IS ESSENTIAL to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

TABLE 1. FORESTRY – PRE-PLANTING

Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* spp., *CORYMBIA MACULATA* AND *PINUS RADIATA*			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE/ha**	**CRITICAL COMMENTS**
Capeweed, Thistles, Volunteer Legumes, Flatweed, Fleabanes	Pre-emergent	800-2400g	Use the higher rate for extended pre-emergence control (>3 months).
***PINUS RADIATA* only**			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE/ha**	**CRITICAL COMMENTS**
Silver Wattle (suppression)	Pre-emergence from seeds	2400g	For best results apply TITAN Clopyralid 750SG Herbicide to bare soil just prior to spring rain or when Wattles are expected to germinate. Avoid application to heavy trash situations. A high level of suppression may not be achieved where rain does not fall for an extended period after application (>1 month), or where very high rainfall occurs after application (>1200 mm/ year).

TABLE 2. FORESTRY – POST-PLANTING

High volume spraying by hand gun

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* spp., *CORYMBIA MACULATA* AND *PINUS RADIATA*			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE/100L Water**	**CRITICAL COMMENTS**
Groundsel Bush	Young seedlings to mature plants	130 or 200g	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than 2m tall or when growth is slow.
Ragwort	Actively growing rosettes up to stem elongation and before flowering	80 to 120g	Spray from the rosette to the shooting stage of growth. Use the higher rate on large multi-crown plants. Addition of a 100% non-ionic surfactant such as BS-1000 at 0.1% v/v is recommended. Add diquat (200g/L) at 1L/100L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added, use a directed spray to avoid tree injury.
Silver Wattle	Active growth spring to summer	200g	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. **Hand gun:** Means high volume NOT low volume knapsack (See GENERAL INSTRUCTIONS – Application). Spray to the point of run-off to give full coverage of leaves and stems. Add organosilicone surfactant (e.g. Pulse®) at 200mL/100L for optimum results.
Cape Ivy	Any growth stage	1300g/ha	Application may be made at any time of the year providing foliage is dry at the time. Avoid spraying non-target plants. Low volume application. For application by hand held weed wiper or CDA use at dilution with water of 100g/L.

TABLE 3. FORESTRY – POST-PLANTING

Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* spp., *CORYMBIA MACULATA* AND *PINUS RADIATA*			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE/ha**	**CRITICAL COMMENTS**
Flatweed, Capeweed, Thistles (except Hardhead Thistle), Volunteer Legumes, Skeleton Weed	Actively growing rosettes, seedlings up to 15cm diameter or height	200 to 400g	Cupping of the tip leaves and 'weepy leader' symptoms may occur on certain *Eucalyptus* spp. and *Corymbia maculata* and are generally transient symptoms and do not result in long-term injury. These symptoms may be more obvious at rates of 400g/ha or higher or where mixtures are used on Blue Gum, Shining Gum and Spotted Gum. Where 'weepy leader' effect is a concern use a directed spray. Use the 200g rate until 3 months post-planting and the 400g rate for trees 3 months and older. Use the low rate only under ideal conditions with excellent weed growth and where knockdown control of small weeds is desired. Use the high rate where longer control is required of larger weeds. For the control of annual and certain perennial grasses TITAN Clopyralid 750SG Herbicide can be tank-mixed with TITAN Hermes 520 Herbicide. See also comments on mixing in Directions for Use. Uptake* Spraying Oil should not be used in tank-mixes with TITAN Hermes 520 Herbicide and TITAN Clopyralid 750SG Herbicide on sensitive species such as Blue Gum, Shining Gum and Spotted Gum where rates of TITAN Clopyralid 750SG Herbicide are more than 800g/ha. Use a 100% non-ionic surfactant such as BS-1000 at 0.1% v/v instead.
Flatweed, Fleabanes, Capeweed, Thistles including Hardhead Thistle, Volunteer Legumes, Skeleton Weed	Actively growing rosettes and seedlings greater than 15cm diameter or height up to stem elongation and before flowering	800g	

TABLE 3. FORESTRY – POST-PLANTING – continued

Boom and Aerial Application

FORESTS AND PLANTATION TREES INCLUDING *EUCALYPTUS* spp., *CORYMBIA MACULATA* AND *PINUS RADIATA*			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE/ha**	**CRITICAL COMMENTS**
Californian Thistle	From early bud to flowering (December to February)	800g	For best control of Californian Thistle use a wetter such as BS-1000 at 0.1% v/v. A second annual application may also be required for best control.
Ragwort	Small rosettes to larger rosettes up to stem elongation and before flowering	400 or 800g	Spray from the rosette to the shooting stage of growth. For small rosette seedling plants use the lower rate. For large rosette multi-crown and/or perennial plants use the higher rate. Addition of a 100% non-ionic surfactant such as BS-1000 at 0.1% v/v is recommended. Add diquat (200g/L) at 1L/100L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added, use a directed spray to avoid tree injury.
Sorrel (suppression only)	Actively growing rosettes, seedlings up to 15cm diameter or height	2400 to 3400g	Higher rates give better suppression. At rates greater than 2400g use a directed spray to avoid tree injury.
***PINUS RADIATA* AND *EUCALYPTUS* spp. PLANTATIONS ONLY**			
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**RATE/ha**	**CRITICAL COMMENTS**
Silver Wattle	Active growth spring to summer (0.5 to 2m tall)	2000g	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. For boom spraying apply in 150 to 200L of water/ha. For aerial treatment apply in a minimum of 50L/ha of water containing 25 to 50% by volume of anti-evaporant oil. Mix TITAN Clopyralid 750SG Herbicide and water first and then add the anti-evaporant oil. Maintain continuous agitation. At rates of 2800g and 3400g for *Eucalyptus* spp. use a directed spray to avoid tree injury.
	Active growth spring to summer (2 to 4m tall)	2800g	
	Active growth spring to summer (4 to 8m tall)	3400g	

TABLE 4. INDUSTRIAL/COMMERCIAL SITUATIONS including RIGHTS-OF-WAY

Boom Application only

WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**RATE/ha**	**CRITICAL COMMENTS**
Capeweed, Thistles, Volunteer Legumes, Flatweed, Fleabanes	Pre-emergent	ALL STATES	800-2400g	Use the higher rate for extended pre- emergence control (>3 months).
Flatweed, Capeweed, Thistles (except Hardhead Thistle), Volunteer Legumes, Skeleton Weed	Actively growing rosettes, seedlings up to 15cm diameter or height		200 to 400g	Use the low rate only under ideal conditions with excellent weed growth and where knockdown control of small weeds is desired. Use the high rate where longer control is required of larger weeds. For the control of annual and certain perennial grasses TITAN Clopyralid 750SG Herbicide can be tank-mixed with TITAN Hermes 520 Herbicide. See also comments on mixing in Directions for Use.
Flatweed, Fleabanes, Capeweed, Thistles including Hardhead Thistle, Volunteer Legumes, Skeleton Weed	Actively growing rosettes and seedlings greater than 15cm diameter or height up to stem elongation and before flowering		800g	
Californian Thistle	From early bud to flowering (December to February)			For best control of Californian Thistle use a wetter such as BS-1000 at 0.1% v/v. A second annual application may also be required for best control.
Ragwort	Small rosettes to larger rosettes up to stem elongation and before flowering		400 or 800g	Spray from the rosette to the shooting stage of growth. For small rosette seedling plants use the lower rate. For large rosette multi-crown and/or perennial plants use the higher rate. Addition of a 100% non-ionic surfactant such as BS-1000 at 0.1% v/v is recommended. Add diquat (200g/L) at 1L/100L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added, use a directed spray to avoid injury to non-target plants.

TABLE 5. INDUSTRIAL/COMMERCIAL SITUATIONS including RIGHTS-OF-WAY

High volume spraying by hand gun

WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**RATE/100L Water**	**CRITICAL COMMENTS**
Groundsel Bush	Young seedlings to mature plants	QLD, NSW, ACT only	130 or 200g	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than 2m tall or when growth is slow.

TABLE 5. INDUSTRIAL/COMMERCIAL SITUATIONS including RIGHTS-OF-WAY – continued High volume spraying by hand gun				
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**RATE/100L Water**	**CRITICAL COMMENTS**
Ragwort	Actively growing rosettes up to stem elongation and before flowering	ALL STATES	80 to 120g	Spray from the rosette to the shooting stage of growth. Use the higher rate on large multi-crown plants. Addition of a 100% non-ionic surfactant such as BS-1000 at 0.1% v/v is recommended. Add diquat (200g/L) at 1L/100L water plus a surfactant after opening of the first flowers, to prevent the formation of viable seed. Where diquat is added, use a directed spray to avoid injury to non-target plants.
Silver Wattle	Active growth spring to summer	NSW, ACT, VIC, TAS, SA only	200g	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. **Hand gun:** Means high volume NOT low volume knapsack (See GENERAL INSTRUCTIONS – Application). Spray to the point of run-off to give full coverage of leaves and stems. Add organosilicone surfactant (e.g. Pulse®) at 200mL/100L for optimum results.
Cape Ivy	Any growth stage	VIC, TAS only	1300g/ha	Application may be made at any time of the year providing foliage is dry at the time. Avoid spraying non-target plants. Low volume application. For application by hand held weed wiper or CDA use at dilution with water of 100g/L.
TABLE 6. PASTURES AND FALLOW LAND – POST-EMERGENCE (ESTABLISHED PERENNIAL GRASS AND SUB CLOVER BASED PASTURES) **(Boom spray application if not specified)**				
WEEDS CONTROLLED	**WEED GROWTH STAGE**	**STATE**	**RATE/ha**	**CRITICAL COMMENTS**
Hardhead Thistle (Creeping Knapweed, Russian Knapweed)	Actively growing plants	QLD, VIC only	**Hand gun:** 200g/100L of water **Boom spray:** 800g or 1600g/ha	**See CRITICAL COMMENTS below for spraying thistles in pastures and fallow land.** Only use the 1600g/ha rate in QLD by boom spray.
St Barnaby's Thistle	5 to 8 leaf and 5 to 10cm diameter	QLD NSW, VIC, TAS, SA only	20g or 40g plus 0.5-1L/ha 2,4-D amine or 1.5-2.5L/ha 2,4-DB or 1L/ha Gramoxone or 1-1.5L/ha Simazine + 1L/ha 2,4-DB	
Thistles including: Nodding, Variegated, Scotch, Spear, Slender, Saffron, St Barnaby's	Rosette stage prior to stem elongation	QLD, NSW, VIC, TAS, SA, WA only	20g or 28g plus 1-1.5L/ha MCPA amine (500g/L)/ha **Drench gun:** 20g/1L of water **Hand gun:** 100g/100L of water	
Nodding Thistle	Rosettes up to 20cm in diameter	NSW only	40g	Apply the spray from September to October. Apply by boom spray only. DO NOT apply to thistles over 20cm in diameter. When thistles are over 20cm in diameter, use TITAN Clopyralid 750SG Herbicide plus MCPA (referred to above). **Clover Damage:** Damage to White Clover will be no greater than damage with MCPA alone and less than damage by TITAN Clopyralid 750SG Herbicide plus MCPA mixtures. Damage to Sub-Clover may be greater than with MCPA or 2,4-D alone. DO NOT use for spot treatment.
Californian Thistle	From early buds to flowering (December to February)	VIC, TAS only	**Hand gun:** 100g/100L of water **Boom spray:** 800g/ha	Addition of a wetting agent at label rates is recommended. Retreatment of regrowth in the year following treatment will usually be necessary to achieve a high level of control. **Note:** Clovers and Medics will be eliminated for at least one year.
Lucerne	30 to 40cm high pre-flowering	QLD, NSW, VIC, SA, WA only	120g plus 1.5-2L/ha Roundup CT Max + either 2L/ha MCPA amine or 2L/ha 2,4-D amine or 2L/ha of 2,4-D ester	Treat healthy, actively growing Lucerne in early spring prior to flowering. After grazing or cutting, allow Lucerne to regrow for approximately 4 weeks before treatment. For best control, do not re-graze for more than 2 weeks after application. For complete control of Lucerne in pasture, cultivate approximately 1 month after herbicide treatment.

CRITICAL COMMENTS – Thistle Control In Pastures

1. **HARDHEAD THISTLES – DO NOT USE HAND GUN APPLICATION ON LUCERNE, CLOVERS AND MEDICS AS THEY WILL BE ELIMINATED FOR AT LEAST ONE YEAR.**
   Victoria only: Use the lower rate only on light soils (sand and sandy loam) where a slightly lower degree of control is acceptable. Use the higher rate on all soil types where complete control is required. Addition of a wetting agent at label rates is recommended for treatment of Hardhead Thistle. Spray between September and April on actively growing plants for effective control. Thorough coverage is essential. Apply in 200 to 250L of water/ha.
2. **BOOM SPRAYING:** Use the higher rates of TITAN Clopyralid 750SG Herbicide plus MCPA on multi-crowned plants or rosettes larger than 30cm in diameter. Spraying may be done at any time during active growth, usually in early winter or spring. Avoid spraying during the dormant winter period or at any time when thistles are not actively growing. Do not spray flowering thistles.
3. **PRE-SPRAYING MANAGEMENT:** The pasture should be slightly grazed prior to spraying to reduce clover and grass cover and expose the smaller thistles to the spray. The grazed pasture should be left 7 days to allow thistles to freshen prior to treatment.
4. **POST-TREATMENT MANAGEMENT:** Response of thistles to treatment with the TITAN Clopyralid 750SG Herbicide plus MCPA mixture will be slow compared to the standard treatments with 2,4-D or MCPA. If possible, delay grazing of sprayed thistles for 14 days after treatment.
5. **CLOVER DAMAGE:** TITAN Clopyralid 750SG Herbicide plus MCPA or 2,4-D mixtures can be damaging to clover. The low rate is no more damaging than label rates of 2,4-D or MCPA. Use 20g/ha mixes when clover is at the 6 trifoliate leaf stage to just prior to flowering. The 28g/ha mix will reduce the clover component of the pasture for about two months. Use the 28g/ha mix from 6 trifoliate leaf stage to flowering to minimize clover injury, and when clover has reached the 6 to 8 trifoliate leaf stage and where thistles are large due to early germination. Clover recovery will be quicker during periods of active growth. If clover damage is the major consideration, use the lower TITAN Clopyralid 750SG Herbicide rate to minimize damage.
6. Gramoxone mixes are for Lucerne pasture use only. Simazine mixes are for Silver Grass control and for Lucerne based pastures only.
7. **HAND GUN (Spot spray):** Treat from rosette stage to early flowering. Thorough spraying is necessary.
8. **DRENCH GUN:** Apply 10mL to rosette crown. To multi-crown plants, apply 10mL to each crown.

TABLE 7. AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, FORESTS, PASTURES AND RIGHTS-OF-WAY

Stem Injection Application on Acacia Species

Mix 200g TITAN Clopyralid 750SG Herbicide with 2.5L of water and apply the diluted mix as directed below.

WEED GROWTH STAGE	RATE	CRITICAL COMMENTS
Single stems less than 25cm diameter at base	1mL of the diluted mix per cut at 10 to 13cm centres	Apply to waist high cuts. See General Instructions – Application section for application method details. DO NOT exceed the recommended spacings from the centre of one cut to the centre of the next cut. Inject each stem of a multi-stem tree where possible.
Multiple stems or more than 25cm diameter at base	2mL of the diluted mix per cut at 10 to 13cm centres	

TABLE 8. WINTER CEREALS AND CANOLA – PRE-SOWING KNOCKDOWN HERBICIDE

WEED	WEED STAGE	RATE g/ha	CRITICAL COMMENTS
Capeweed, Chickpea (volunteer), Faba Bean (volunteer), Sub-Clover and Vetch	Up to 8 leaf and maximum 10cm diameter	60 plus a knockdown herbicide	**Pre-sowing:** This rate should only be used in tank mixture with formulations of paraquat/diquat or glyphosate.

TABLE 9. WINTER CEREALS AND CANOLA – POST-SOWING PRE-EMERGENCE TO 3 LEAF CROP STAGE

WEED	WEED STAGE	RATE g/ha	CRITICAL COMMENTS
Capeweed (in cereals only, WA only)	Pre-emergence to 8 leaf and maximum 10cm diameter	60 plus diuron at 300mL/ha	**Post-sowing Pre-emergent to 3 Leaf:** This rate should only be used in tank mixture with diuron for control of transplants.
Capeweed, Faba Bean (volunteer) and Sub-Clover	Pre-emergence	120-240	Rates of 120-200g/ha give good suppression (reduced seed set and up to 80% weed control). 240g/ha is required for good control of Capeweed and Sub-Clover. Apply to moist soil and time treatment for major germination of weeds. Good soil moisture and application close to time of weed germination is essential for best control.

TABLE 10. WINTER CEREALS – EARLY POST-EMERGENCE 2 LEAF TO 1ST NODE CROP STAGE

WEED	WEED STAGE	RATE g/ha	CRITICAL COMMENTS
Capeweed (WA only)	Cotyledons to 6 leaf and maximum 5cm diameter	60	**Early Post-emergent:** Weeds should be young, actively growing and not larger than listed size. Weeds will become stunted and non-competitive soon after application, although final results may not show for some weeks.
Capeweed, Soldier Thistle, St Barnaby's Thistle	Up to 10cm diameter (4 to 8 leaf)	120	
Chickpea, Lentils and Safflower (volunteer)	Up to 6 leaf	100	
Faba Bean and Lupins (volunteer)	Up to 4 leaf	100	Faba Beans and Lupins will usually survive, but will be stunted, uncompetitive and generally not set viable seed.
Field Pea (volunteer)	Maximum 10cm high or 6 nodes	60	
Medic and Lucerne seedlings (volunteer)	Up to 8 leaf	60-80	For best control of hairy leaved medics such as Snail Medic, add 500mL Uptake* Spraying Oil/100L of water.
Sub-Clover (volunteer)	Up to 6 leaf		
Vetch (volunteer)	Runners up to 10cm and maximum 16 leaf	40	

TITAN AG CROP PROTECTION

TABLE 11. WINTER CEREALS – POST-EMERGENCE TANK MIXTURES

NSW, VIC, TAS, SA, WA only (unless specified)

Weeds should be young and actively growing. Weeds will become stunted and non-competitive soon after application although final results may not show for some weeks. Where a rate range is listed, use low rate mixtures for small weeds to 5cm across and higher rate mixtures for weeds up to 10cm across. Use a surfactant such as BS-1000 for granular herbicides or the recommended adjuvant on the partner herbicide label.

WEED	WEED STAGE	RATE g/ha	CRITICAL COMMENTS
Capeweed	Up to 4 leaf, 10cm diameter	80-120 plus 20g/ha TITAN Chlorsulfuron 750	TITAN Chlorsulfuron 750 mixes – 2 leaf to 1st node crop stage.
		40 plus 5-7g/ha Eclipse® + 0.35-0.5L/ha MCPA LVE	Eclipse/MCPA LVE mixes – 3 leaf to 1st node. Where 0.5L/ha MCPA LVE added, apply from 4-5 leaf to 1st node crop stage.
		40 plus 5g/ha TITAN Metsulfuron-methyl 600 + 0.5L/ha MCPA LVE	TITAN Metsulfuron-methyl 600/MCPA LVE mixes – 4-5 leaf to 1st node crop stage.
		40 plus 0.75L/ha TITAN Diflufenican + MCPA	TITAN Diflufenican+MCPA mixes – 3 leaf to 1st node crop stage, but not on barley or Kulin wheat in WA.
Field Pea (volunteer)	Up to 6 node, 10cm diameter	40 plus 5-7g/ha Eclipse + 0.5-0.7L/ha bromoxynil/MCPA	Bromoxynil/MCPA mixes – 3 leaf to 1st node crop stage.
Vetch (volunteer)	Up to 4 branch, 10cm diameter	40 plus 5-7g/ha Eclipse + 0.35-0.5L/ha MCPA LVE	Eclipse/MCPA LVE mixes – 3 leaf to 1st node. Where 0.5L/ha MCPA LVE added apply from 4-5 leaf to 1st node crop stage.
		40 plus 5g/ha TITAN Metsulfuron-methyl 600 + 0.35L/ha MCPA LVE or 30 plus 0.7L/ha MCPA LVE	Use 30g/ha only in combination with MCPA LVE. TITAN Clopyralid+MCPA LVE mixes – 4-5 leaf to 1st node crop stage.
Chickpea (volunteer) Faba Bean (volunteer)	Up to 4 branch, 10cm diameter Up to 4 node, 10cm tall	40 plus 5-7g/ha Eclipse® + 0.5-0.7L/ha Bromoxynil/MCPA	Bromoxynil/MCPA mixes – 3 leaf to 1st node crop stage.
Lupin (volunteer) Sub-Clover (volunteer)	Up to 6 leaf, 10cm tall Up to 5 trifoliate, 5cm diameter	40 plus 5-7g/ha Eclipse® + 0.35-0.5L/ha MCPA LVE	Eclipse/MCPA LVE mixes – 3 leaf to 1st node. Where 0.5L/ha MCPA LVE added, apply from 4-5 leaf to 1st node crop stage.
Prickly Lettuce	Up to 6 leaf, max 10cm diameter	40 plus 5g/ha TITAN Metsulfuron-methyl 600	TITAN Metsulfuron-methyl 600/MCPA mixes – 4-5 leaf to 1st node crop stage.
Medic (volunteer)	Up to 6 leaf, max 5cm diameter	40 plus 0.35-0.7L/ha MCPA LVE	
Prickly Lettuce	Up to 6 leaf, max 10cm diameter	60 plus 0.7L/ha MCPA LVE	TITAN Clopyralid+MCPA LVE mixes – 4-5 leaf to 1st node crop stage.
Thistles including Nodding, Saffron, Scotch, Slender, Spear, Stemless, Variegated	Rosettes up to 10cm max diameter	20 plus 1L/ha MCPA amine (500g/L) or 20 plus 0.7L/ha MCPA LVE	**For thistle control:** TITAN Clopyralid 750SG Herbicide rate will depend on density, growth stage, climatic conditions and time of application. Use higher rates for best control where high density and/or large weeds occur. MCPA or 2,4-D mixes – apply from 4-5 leaf to 1st node crop stage.
St Barnaby's Thistle	4 to 8 leaf, 5 to 10cm across	20–40 plus 0.5-1L/ha 2,4-D amine or 1-1.5L/ha MCPA amine	
Sowthistle (common) (QLD, NSW, VIC, TAS, SA, WA)	Young rosettes up to 8 true leaves	40 plus 0.8L/ha TITAN Picloram + MCPA 242 or 5g/ha TITAN Metsulfuron-methyl 600 + 0.7L/ha MCPA LVE	Apply to actively growing young rosettes. Use Uptake Spraying Oil at 500mL/100L of water for improved control with TITAN Picloram+MCPA 242 tank-mixes or BS-1000 with TITAN Metsulfuron-methyl 600/MCPA LVE tank-mixes. Apply tank-mixes from 4-5 leaf to 1st node crop stage.
Skeleton Weed (NSW, VIC, SA, WA only)	5 to 15cm rosettes	200 plus 1L/ha MCPA amine (500g/L)	Weeds should be a minimum 5cm in diameter and growing actively. This rate will give control until harvest and substantially reduce weed numbers the following season. Apply from 4-5 leaf to 1st node crop stage.

TABLE 12. CANOLA – POST-EMERGENCE 2 TO 8 LEAF CROP STAGE			
WEED	**WEED STAGE**	**RATE g/ha**	**CRITICAL COMMENTS**
Capeweed, Cotula, Saffron Thistle, Skeleton Weed, Soldier Thistle	Up to 10cm diameter, 4 to 8 leaf	120	Weeds should be young and actively growing. Weeds will become stunted and will not be competitive soon after application although final results may not show for some weeks. Skeleton Weed will only be controlled until harvest.
Chickpea, Lentils and Safflower (volunteer)	Up to 6 leaf	100	**For the control of annual grasses:** TITAN Clopyralid 750SG Herbicide is compatible with TITAN Hermes 520 Herbicide. Uptake Spraying Oil should be added to this tank-mix for best grass control. TITAN Clopyralid 750SG Herbicide + TITAN Hermes 520 Herbicide + Uptake Spraying Oil is compatible and selective to Canola.
Faba Beans and Lupins (volunteer)	Up to 4 leaf		Faba Beans and Lupins will usually survive, but will be stunted, uncompetitive and generally not set viable seed.
Field Peas (volunteer)	Maximum 10cm high or 6 nodes	60	
Medics and Lucerne seedlings (volunteer)	Up to 8 leaf		For best control of hair leaved medics such as Snail Medic, add 500mL Uptake Spraying Oil/100L water.
Sub-Clover (volunteer)	Up to 6 leaf		
Vetch (volunteer)	Runners to 10cm max, 16 leaf	40	Will not control Woolly Pod Vetch.
St Barnaby's Thistle	4 to 8 leaf, 5 to 10cm diameter	60-120	TITAN Clopyralid 750SG Herbicide rate will depend on weed density, growth stage, climatic conditions and time of application. Use higher rates for best control where high density and/or large weeds occur.

TABLE 13. HERBICIDE TOLERANT CANOLA – POST-EMERGENCE 2 TO 8 LEAF CROP STAGE			
WEED	**WEED STAGE**	**RATE g/ha**	**CRITICAL COMMENTS**
Clearfield Canola			
Cotula (common), Capeweed	Up to 6 leaf	60 plus 40g OnDuty*	Where Capeweed is a significant component of the weed spectrum, a tank-mix with TITAN Clopyralid 750SG Herbicide may be needed post-emergence. DO NOT exceed this rate as reduced control of grass weeds may occur.
Triazine Tolerant Canola			
Capeweed, Lupins (volunteer), Saffron Thistle, Skeleton Weed, Soldier Thistle and weeds from conventional Canola	Up to 6 leaf	120	TITAN Clopyralid 750SG Herbicide is compatible with atrazine and simazine for use in triazine tolerant Canola. Uptake Spraying Oil at 500mL/100L of water should be added to this mix for best grass and broadleaf weed control. For the control of annual grass weeds TITAN Clopyralid 750SG Herbicide + atrazine + TITAN Hermes 520 Herbicide + Uptake Spraying Oil are compatible and selective to triazine tolerant Canola.

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

WITHHOLDING PERIODS:
PASTURES, FALLOW LAND and INDUSTRIAL/COMMERCIAL SITUATIONS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION
CEREALS: DO NOT GRAZE OR CUT TREATED CEREALS FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION
DO NOT APPLY LATER THAN 10 WEEKS BEFORE HARVEST
CANOLA: DO NOT GRAZE OR CUT TREATED CANOLA FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION
DO NOT HARVEST EARLIER THAN 12 WEEKS AFTER APPLICATION
FORESTS: NONE REQUIRED WHEN USED AS DIRECTED

Plantback periods NSW, VIC, SA, WA (winter rainfall areas)			
TITAN Clopyralid 750SG Herbicide Rate g/ha	**Up to 120**	**200**	**>200**
Chickpea, Field Pea, Faba Bean, Lupins, Medics and Clover	9 months	12 months	24 months
Wheat, Barley, Oats	1 week	–	–
Plantback period North NSW, QLD (summer rainfall areas)			
TITAN Clopyralid 750SG Herbicide Rate g/ha	**30**	**60**	**120**
Wheat, Barley, Oats	1 week	1 week	–
Chickpea	–	12 weeks	–
Lucerne	36 weeks	36 weeks	36 weeks
Cotton	2 weeks	4 weeks	8 weeks
Sorghum, Maize	1 week	2 weeks	2 weeks
Sunflower	5 weeks	8 weeks	24 weeks
Soybean	1 week	1 week	24 weeks
Note: Susceptible crops should not be sown for at least 2 years where TITAN Clopyralid 750SG Herbicide at more than 120g/ha has been used in northern Australia.			

GENERAL INSTRUCTIONS

MIXING

Measure the required quantity of granules by weighing on scales. TITAN Clopyralid 750SG Herbicide granules are highly soluble in water and will dissolve rapidly once added to fast moving water. Maintain agitation at all times, including during mixing as well as spraying.

Spray rigs with premix hoppers

For spray rigs that have a drop down chemical induction hopper, three-quarter fill this hopper with water and have the rinsing sprinkler operating. Add the TITAN Clopyralid 750SG Herbicide and when dissolved, transfer this batch into the quarter filled main tank. Continue to rinse the hopper until the entire product has washed through.

Spray rigs with limited bypass agitation

For spray rigs that have limited bypass agitation, then, as for most granulated formulations, pre-dissolve the TITAN Clopyralid 750SG Herbicide in a bucket before adding them to the main tank. Add TITAN Clopyralid 750SG Herbicide while stirring until the granules have dissolved.

TANK-MIXES

The following order should be followed:

1. Quarter fill the spray tank maintaining agitation
2. Add TITAN Clopyralid 750SG Herbicide granules, using the mixing procedure above.
3. Add TITAN Hermes 520 Herbicide if it is to be used in the tank-mix.
4. Add water to half fill the spray tank.
5. Add wettable powders, water dispersible granules or suspension concentrates.
6. Add other emulsifiable concentrates including other selective grass herbicides.
7. If Uptake* Spraying Oil is to be used add this when spray tank is half full.
8. If other adjuvants or a wetting agent is to be used than add these according to their label.
9. Add water to bring to the final spray volume. Only mix sufficient spray solution for immediate use and avoid storing.

COMPATIBILITY

Conventional Canola: TITAN Clopyralid 750SG Herbicide + TITAN Hermes 520 Herbicide + Uptake Spraying Oil are compatible and selective.

Triazine Tolerant Canola: Atrazine + TITAN Clopyralid 750SG Herbicide + TITAN Hermes 520 Herbicide + Uptake Spraying Oil are compatible and selective.

Clearfield Canola: OnDuty* + TITAN Clopyralid 750SG Herbicide are compatible and selective.

TITAN Clopyralid 750SG Herbicide is compatible with the following:
Broadleaf Herbicides: Starane*, metsulfuron-methyl, bromoxynil, bromoxynil/MCPA LVE, chlorsulfuron, diuron, glyphosate, MCPA amine, MCPA LVE, paraquat, Spray-Seed, terbutryn, 2,4-D amine, Broadstrike*, Eclipse*, Eclipse/MCPA LVE, metsulfuron-methyl/MCPA LVE, Garlon* 600, atrazine, simazine, TITAN Picloram + MCPA 242, TITAN Diflufenican + MCPA.

Grass Herbicides on Broadleaf Crops: TITAN Hermes 520 Herbicide, Select*, OnDuty, atrazine, simazine.

Grass Herbicides in Cereal Crops: Diclofop-methyl, Achieve* WG, Topik* 240EC.

Adjuvants: Uptake Spraying Oil, BS-1000.

APPLICATION

Boom Spraying Crop and Pastures

Apply TITAN Clopyralid 750SG Herbicide in sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft, delivering medium to coarse droplets and not less than 50L/ha water volume for boom sprayers or not less than 20L/ha for aerial applications.

DO NOT apply by aircraft in industrial/commercial situations.

Hardhead Thistle: use a spray volume of 200 to 250L/ha of water.

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

High Volume Hand Gun

Apply the recommended mix to give full coverage of leaves and stems through a No. 6-8 tip at 700 to 1500kPa. Spray volume for effective coverage of dense pasture weeds should be 10 to 15 litres of spray per 100m^2 (10m x 10m) of infestation. For larger areas an equivalent would be 1000 to 1500 litres per infested hectare.

Stem Injection

To make a stem injection pocket at waist height, use a 3/4 length axe with a blade width of 5 to 7cm. The axe cut must be through the bark and deep enough to place all the chemicals in contact with the sap wood. The chemical must be applied immediately after the injection pocket is made. Apply chemical with a Phillips 5mL vaccinator fitted with a tree injector kit which can be accurately calibrated. Set vaccinator to deliver 1mL of the diluted mix. When treating regrowth less than the width of the axe, ensure chemical does not run out the sides of the cut, as reduced control will result. This can be overcome by using the corner of the axe to make the pocket in the stem.

CLEANING SPRAY EQUIPMENT

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

Partial Cleaning

Before spraying crops that are selective to TITAN Clopyralid 750SG Herbicide
After using TITAN Clopyralid 750SG Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles. Drain and repeat procedure twice.

Complete Cleaning

Before spraying crops that are susceptible to TITAN Clopyralid 750SG Herbicide
After using TITAN Clopyralid 750SG Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate as above, then drain. Quarter fill the tank again and add an alkali detergent (eg Surf*, Omo*, Drive*) at 500mL/100L water or 500g/100L water and circulate throughout the system for at least fifteen minutes. Drain, remove filters and nozzles and clean separately. Rinse inside the tank thoroughly using a pressure hose and flush system with clean water. Chlorine based cleansers are NOT recommended. Rinse water should be discharged onto a designated disposal area, or if this is unavailable, onto unused land away from desirable plants and water sources.

RESISTANT WEEDS WARNING

GROUP **4** HERBICIDE

TITAN Clopyralid 750SG Herbicide is a member of the pyridines group of herbicides. The product has the disrupters 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 the product to control resistant weeds. Strategies to minimize the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant or local Department of Agriculture.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.
DO NOT allow spray drift onto susceptible crops. Susceptible crops include tobacco, chickpeas, cotton, faba beans, field peas, fruit trees, lentils, lupins, lucerne, medics, ornamentals, potatoes, safflower, sub-clover, tomatoes, vegetables, vines, wattles and white clover.

Composts and Mulches: DO NOT apply TITAN Clopyralid 750SG Herbicide to crops or pastures that will be used for the production of compost or mulches or mushroom substrate. Such compost or mulch made from plant material treated with TITAN Clopyralid 750SG Herbicide may cause damage to susceptible crops and plants.

Susceptible crops and plants include, but are not limited to chickpeas, clover, cotton, faba beans, field peas, fruit trees, lentils, lupins, lucerne, medics, ornamentals, potatoes, safflower, tomatoes, vegetables, grape and kiwifruit vines, vetches and wattles. Field peas, faba beans, lentils and vetches are particularly susceptible and should not be sown the season following an application of TITAN Clopyralid 750SG Herbicide at 200g/ha.

Where TITAN Clopyralid 750SG Herbicide residue carry over from use rates of less than 200g/ha is suspected and susceptible crops are to be planted, test the treated area as follows:

Field bioassay – where rain allows, plant a small area of the susceptible crop 4 to 6 weeks before desired planting date and take note of any symptoms of injury. If any herbicide symptoms are observed, only plant either Canola or a Cereal (see recommendation for northern and southern Australia below).

Pot bioassay – where not practical to do field bioassay, plant a small number of seeds of the susceptible crop into pots containing soil from the treated field.

TITAN AG CROP PROTECTION

Do this 4 to 6 weeks before desired planting date. If any herbicide symptoms are observed, only plant either canola or a cereal (see recommendation for northern and southern Australia below).

Stubble from treated crops – ensure that harvesters effectively spread crop straw and do not leave a heavy 'header trail' after harvest. Burn (if legal in the area), bale and remove, slash or incorporate stubble as soon as practical after harvest and as long as possible before planting next year to allow microbial breakdown of any residues in straw. Heavy stubble loads may carry more residue into the following season. Where heavy stubble burdens and/or non-wetting soils exist and less than recommended rain amounts have occurred from application to planting the susceptible crop (see below), only plant a winter or summer cereal or canola.

Planting crops following use of TITAN Clopyralid 750SG Herbicide in previous crop – planting crops 'dry' without significant rain (see below) in the 'autumn break' increases the risk of injury to susceptible crops. This practice should be avoided, or only plant a winter or irrigated summer Cereal crop or Canola. In severely dry conditions, where less than 30% of average annual rainfall and/or less than the minimum rain (see below) has fallen between application and planting the next year, only plant a winter or irrigated summer Cereal or Canola.

PROTECTION OF LIVESTOCK

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

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

TITAN Clopyralid 750SG Herbicide has low toxicity to fish, birds, honey bees, livestock, earthworms and aquatic organisms. DO NOT contaminate streams, rivers or watercourses with chemical or used containers.

STORAGE AND DISPOSAL

Bottle: Store in the closed original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Store in area sheltered from rainfall. DO NOT store near feed stuffs, fertilisers or seed. 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 bury 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.

Bag: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake and empty contents into spray tank. DO NOT dispose of undiluted chemicals on-site. 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.

SMALL SPILL MANAGEMENT

Sweep up material and contain in a refuse vessel for disposal in the same manner as for containers (see Storage and Disposal section).

SAFETY DIRECTIONS

Will irritate the eyes. Avoid contact with eyes. When opening the container and preparing product, wear cotton overalls, over normal clothing, buttoned to the neck and wrist elbow-length chemical resistant gloves and goggles or face shield. When using the prepared spray, wear elbow-length chemical resistant gloves and face shield or goggles. If applying by hand wear cotton overalls, or equivalent clothing, buttoned to the neck and wrist and elbow-length chemical resistant gloves. Wash hands after use. After each day's use, wash gloves, goggles or face shield and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Clopyralid 750SG 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: May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. Precautionary Statements: Wear protective gloves, protective clothing, eye protection and face protection. Avoid breathing dust/fumes. Avoid release to the environment. Wash all exposed external body areas thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.



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TITAN AG CROP PROTECTION