READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

FLUMETSULAM 800 WG

HERBICIDE

ACTIVE CONSTITUENT: 800g/kg FLUMETSULAM

GROUP **2** HERBICIDE



A water dispersible granule formulation for the post-emergence and salvage control of certain broadleaf weeds in winter cereals (including those undersown with clover, lucerne or medics); clover, fenugreek, lathyrus, lucerne, medic, serradella, and vetch (Popany only) seed crops and pastures; chickpeas, field peas, lentils, maize, peanuts; and for the pre-emergent control of certain broadleaf weeds in maize and soybeans as specified in the Directions For Use.

APVMA Approval No.: 68367/105053

Pack Size: 500g; 1kg

TITAN AG
CROP PROTECTION

TITAN AG Pty Ltd | ABN 57 122 081 574
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WG Formulation Type
Water Dispersible Granule

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

9 3077
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains flumetsulam)
PG III Hazchem 2Z

DIRECTIONS FOR USE

Restraints:

DO NOT apply to plants which may be stressed (not actively growing) due to prolonged periods of extreme temperature (less than 5ºC or greater than 30ºC), moisture stress (water-logged or drought affected), poor nutrition or previous herbicide treatment as reduced levels of control may result.

DO NOT apply post-emergence treatments if rain is likely within 4 hours.

DO NOT irrigate (any method) treated crop or pasture for 48 hours after application.

DO NOT apply to plants which have suffered frosting for extended periods. Allow at least 2 days frost free prior to treatment.

DO NOT apply to crops affected by disease or by previous herbicide treatment (eg triazines or sulfonylureas).

TABLE 1A. CHICKPEAS, FIELD PEAS, LENTILS, FENUGREEK, LATHYRUS, VETCH (POPANY only) and SERRADELLA

CROP	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Chickpeas	4-6 branches (no later than 6 weeks after emergence)	TITAN Flumetsulam 800 WG Herbicide usually causes some transient crop yellowing and can cause reddish discolouration and height suppression. Flowering may be delayed resulting in yield suppression.	DO NOT use any spray additives, or tank mix any other chemicals with TITAN Flumetsulam 800 WG Herbicide when using on Chickpeas and Field Peas.
Field Peas	2 to 6 nodes (no later than 6 weeks after emergence)	TITAN Flumetsulam 800 WG Herbicide may cause transient crop yellowing and height suppression. On light soils in dry seasons flowering may be delayed resulting in yield suppression.	
Lentils	4-8 fully expanded leaves DO NOT apply later than 6 weeks after crop emergence	TITAN Flumetsulam 800 WG Herbicide may cause transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (eg. frost, drought, nutrient deficiency, disease) may lengthen the time needed for Lentils to recover. In seasons where a dry spring occurs, yields may be suppressed. Tank mixes with other products may result in growth suppression and delayed flowering which can result in yield suppression.	Uptake Spraying Oil at 500mL/100L or TITAN Wetter 1000 Wetting Agent at 200mL/100L may be applied with TITAN Flumetsulam 800 WG Herbicide to Lentils.
Fenugreek, Lathyrus, Vetch (Popany only)	3 fully expanded leaves onwards		Use TITAN Flumetsulam 800 WG Herbicide or TITAN Flumetsulam 800 WG Herbicide plus a wetter only. Tank mixtures with other herbicides are not recommended.
Serradella	3 fully expanded leaves onwards		Uptake Spraying Oil at 500mL/100L or TITAN Wetter 1000 Wetting Agent at 200mL/100L may be applied with TITAN Flumetsulam 800 WG Herbicide for Serradella.

TABLE 1B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 1A CROPS

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up To Leaf No. or	Up To Plant size (cm)		
CONTROLLED				
Amsinckia (Yellow Burrweed)	10 leaf	10cm diameter	25	Where recommended, use of either a wetter or Uptake Spraying Oil with TITAN Flumetsulam 800 WG Herbicide will provide better weed control.
Ball Mustard	6 leaf	5cm diameter		
Charlock	8 leaf	10cm diameter		Spray Charlock as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Indian Hedge Mustard	6 leaf	5cm diameter		
Lupins	10 leaf	10cm high		
Marshmallow (Small Flowered Mallow)	4 leaf	10cm diameter		
Pheasant's Eye	8 leaf	10cm diameter		
Shepherd's Purse	8 leaf	10cm diameter		
Three-horned Bedstraw	6 whorls	10cm high		
Turnip Weed	8 leaf	5cm diameter		
Volunteer Canola	8 leaf	10cm diameter		
Ward's Weed	8 leaf	10cm diameter		
Wild Turnip	6 leaf	5cm diameter		
SUPPRESSED				
Capeweed (WA only)	4 leaf	10cm diameter	25	Under ideal growing conditions, TITAN Flumetsulam 800 WG Herbicide will provide useful suppression of Capeweed and Doublegee. Best results will be achieved when a pre-emergence herbicide has already been used.
Doublegee (Spiny Emex) (WA only)	4 leaf	10cm diameter		Under ideal growing conditions, TITAN Flumetsulam 800 WG Herbicide without an adjuvant will give a biomass reduction of 50%-70% of Wild Radish. Surviving plants may flower and set viable seed. Best results will occur with treatment in conditions of >5ºC with bright sunny conditions and use of higher water rates of 75-100L/ha with fine-medium quality spray droplets to get excellent spray coverage.
Wild Radish	4 leaf	5cm diameter		

TITAN AG CROP PROTECTION

TABLE 2A. WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE (INCLUDING THOSE UNDERSOWN WITH CLOVER, LUCERNE OR MEDICS), CLOVER, LUCERNE AND MEDIC CROPS AND PASTURES

CROP/SITUATION	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Wheat	3 leaf until start of jointing (Zadoks 13-31)		Always apply with Uptake Spraying Oil at 500mL/100L or a 100% concentrate non-ionic wetting agent such as TITAN Wetter 1000 Wetting Agent at 200mL/100L.
Barley, Oats	Mid-tillering to start of jointing (Zadoks 23-31)	Transient stem shortening and crop discolouration may occur, although yields are normally unaffected. Where Barley and Oats are undersown, a vigorous legume component may lengthen the time needed for the cereal to recover, especially if the cereal is stressed by lack of moisture, trace element deficiency or disease. In severe cases, yields may be suppressed.	Use only with a wetting agent such as TITAN Wetter 1000 Wetting Agent when either applying TITAN Flumetsulam 800 WG Herbicide alone or with partner products in Barley and Oats.
Stirling Barley (WA only)	Apply no earlier than Zadoks 31		
Triticale, Cereal Rye	Mid-tillering to start of jointing (Zadoks 23-31)		Always apply with Uptake Spraying Oil at 500mL/100L or a 100% concentrate non-ionic wetting agent such as TITAN Wetter 1000 Wetting Agent at 200mL/100L.
Medic, Lucerne and Clover seed crops and pastures including; Barrel Medic, Snail Medic, Spineless Burr Medic, Subterranean Clover, White Clover	2 to 3 trifoliate leaves onwards	**Medic, Lucerne and Subterranean Clover (Sub-clover)** – When TITAN Flumetsulam 800 WG Herbicide is applied at 25g/ha + Uptake or wetter, yield reduction may occur when treating Serena or Paraggio Medic or Nungarin Sub-clover. DO NOT apply to lucerne seed crops less than 8 weeks before flowering.	Always apply with Uptake Spraying Oil at 500mL/100L or a 100% concentrate non-ionic wetting agent such as TITAN Wetter 1000 Wetting Agent at 200mL/100L. **In Medics DO NOT use with MCPA.** **In Lucerne DO NOT use with MCPA.**
Grazing Lucerne	4 trifoliate leaves onwards	Use the 50g/ha rate in grazing lucerne only. DO NOT apply at 50g/ha to Lucerne used for seed production.	
Fence lines, stock camps, stockyards, commercial areas and pastures including Medic, Lucerne and Clover pastures	2 to 3 trifoliate leaves onwards (see crop tolerance)		Use Uptake Spraying Oil at 500mL/100L.
SALVAGE SPRAY			
Cereals: Wheat, Barley, Oats, Triticale, Cereal Rye	Flowering (anthesis) to early dough (Zadoks 61-83)	DO NOT apply at 25g/ha.	
Pastures, Lucerne, Clover, Medics	Advanced seedlings or re-growth after cutting or grazing		

TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up To Leaf No. or	Up To Plant size (cm)		
Amsinckia (Yellow Burrweed)	10 leaf	10cm diameter	25 + Uptake or wetter	
Ball Mustard	6 leaf	5cm diameter		
Buchan Weed	8 leaf	10cm diameter	**Lucerne and/or Clover only** 25 + wetter + 1.5-2.5L/ha 2,4-DB (500g/L)	
			Grazing Lucerne only 50 + Uptake or wetter	Use the 50g/ha rate in grazing Lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at 50g/ha to Lucerne used for seed production.
Calepina (White Ball Mustard)	8 leaf	10cm diameter	25 + Uptake or wetter	
Capeweed	4 leaf	10cm diameter	25+ Uptake or wetter + 700mL/ha (bromoxynil 200g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. In pasture, spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Charlock	8 leaf	10cm diameter	25 + Uptake or wetter	Spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Cotula (WA only)	4 leaf	10cm diameter	25 + Uptake or wetter	Use Uptake Spraying Oil at 500mL/100L or wetting agent such as TITAN Wetter 1000 Wetting Agent at 200mL/100L.

TITAN AG CROP PROTECTION

TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS - continued

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up To Leaf No. or	Up To Plant size (cm)		
Doublegee (Spiny Emex)	6 leaf	15cm diameter	25 + Uptake or wetter + 700mL/ha TITAN Bromoxynil 200 Selective Herbicide or 25 + wetter + 1.5-2.5L/ha 2,4-DB (500g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. In pasture, spray as soon as possible after the autumn break. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower. TITAN Flumetsulam 800WG Herbicide + bromoxynil tank mix – use Uptake Spraying Oil or a wetter.
Dwarf Marigold (Poverty Weed)	10 leaf	15cm high	15 + Uptake or wetter	
Fat Hen	15 leaf	20cm high	**Spring/summer pasture and Lucerne only** 25 + Uptake or wetter	Spring and summer pasture and Lucerne application only.
			Grazing Lucerne only 50 + Uptake or wetter	Use the 50g/ha rate in grazing Lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at 50g/ha to Lucerne used for seed production.
Fumitory	6 leaf	8cm diameter	25 + 300mL/ha TITAN Terbutryn 500 SC Herbicide + wetter	TITAN Flumetsulam 800WG Herbicide + TITAN Terbutryne 500 SC Herbicide tank mixes – only use a wetter. **Note:** This mixture is only approved in NSW, VIC and Tasmania on pastures.
Hedge Mustard, Indian Hedge Mustard	8 leaf	10cm diameter	25 + Uptake	
Lupins	10 leaf	10cm high	25 + Uptake or wetter	
WA Blue and Narrow Leaf Lupins (WA only)	4 to 8 leaf		10 + Uptake or wetter	
Marshmallow (Small Flowered Mallow) seedlings	4 leaf	10cm diameter	25 + Uptake or wetter or 15 + wetter + 700mL/ha TITAN Bromoxynil MA Selective Herbicide or 15 + wetter + 350mL/ha TITAN Terbutryn 500 SC Herbicide + 700mL/ha MCPA amine (500g/L)	Add a wetter to TITAN Flumetsulam 800WG Herbicide + MCPA/terbutryn or TITAN Flumetsulam 800WG Herbicide + bromoxynil/MCPA mixes – only use a wetter. Only use bromoxynil/MCPA and TITAN Terbutryn 500 SC Herbicide + MCPA mixes in cereals that are NOT undersown with Clovers, Medics or Lucerne.
	10 leaf	20cm diameter	25 + wetter + 2,4-DB (500g/L) 1.5-2.5L/ha	For older plants see Weeds Suppressed. TITAN Flumetsulam 800 WG Herbicide + 2,4-DB tank mixes – only use a wetter.
			Grazing Lucerne only 50 + Uptake or wetter	Use the 50g/ha rate in grazing Lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at 50g/ha to Lucerne used for seed production.
Paterson's Curse (Salvation Jane)	8 leaf	10cm diameter	25 + Uptake or wetter + bromoxynil (200g/L) 700mL/ha or 25 + wetter + TITAN Terbutryn 500 SC Herbicide 300mL/ha	In pasture, larger plants and any affected by stress or grazing prior to treatment may re-grow and flower. For best results follow up with moderate grazing two weeks after application. With TITAN Terbutryn 500 SC Herbicide, apply in a minimum spray volume of 100L/ha from the ground or 50L/ha from aircraft.
Peppercress seedlings	8 leaf	10cm diameter	25 + Uptake or wetter	
	10 leaf	15cm diameter	25 + wetter + 2,4-DB (500g/L) 1.5-2.5 L/ha	
Pheasant's Eye	7 leaf	10cm high	25 + Uptake or wetter	
Shepherd's Purse	8 leaf	10cm diameter		
Three-horned Bedstraw	6 whorls	10cm high		
Turnip Weed	8 leaf	5cm diameter	15 + Uptake or wetter	
	12 leaf	10cm diameter	25 + Uptake or wetter	
Volunteer Canola	8 leaf	10cm diameter		
Ward's Weed				

TITAN AG CROP PROTECTION

TABLE 2B. WEEDS CONTROLLED IN TABLE 2A CROPS - continued

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up To Leaf No. or	Up To Plant size (cm)		
Wild Radish	6 leaf	15cm diameter	25 + Uptake or wetter + TITAN Bromoxynil 200 Selective Herbicide 700mL/ha or 25 + wetter + MCPA amine (500g/L) 500mL/ha	When conditions at spraying are less than ideal (see RESTRAINTS above), or when the crop is not competitive, some radish plants may survive to flower and set viable seed. **DO NOT use MCPA amine in cereals undersown with Clover, Medics or Lucerne.** **In Lucerne DO NOT use MCPA.** **In Medics DO NOT use MCPA.** TITAN Flumetsulam 800 WG Herbicide + MCPA amine tank mixes – use Uptake Spraying Oil or a wetter. TITAN Flumetsulam 800 WG Herbicide + MCPA/terbutryn or TITAN Flumetsulam 800 WG Herbicide + bromoxynil/ MCPA tank mixes – only use a wetter. DO NOT use MCPA amine or MCPA amine + TITAN Terbutryn 500 SC Herbicide in cereals undersown with Clover, Medics or Lucerne.
Wild Radish (cereals)	6 leaf	15cm diameter	15 + wetter + 700mL/ha TITAN Bromoxynil MA Selective Herbicide or 15 + Uptake or wetter + 700mL/ha MCPA amine (500g/L) or 15 + wetter + 700mL/ha MCPA amine (500g/L) + 350mL/ha TITAN Terbutryn 500 SC Herbicide	
Wild Turnip	10 leaf	10cm diameter	25 + Uptake or wetter	
Wireweed	10 leaf	15cm diameter	**Pasture and Lucerne only** 25 + wetter + 2,4-DB (500g/L) 1.5-2.5L/ha	Undersown Clovers and Lucerne, spring and summer sown pasture and Lucerne crops only.

TABLE 2C. WEEDS SUPPRESSED IN TABLE 2A CROPS

WEED	WEED GROWTH STAGE		RATE g/ha	CRITICAL COMMENTS
	Up To Leaf No. or	Up To Plant size (cm)		
Buchan Weed	8 leaf	10cm diameter	25 + Uptake or wetter	TITAN Flumetsulam 800 WG Herbicide + 2, 4-DB tank mixes – only use a wetter.
Deadnettle	6 leaf	5cm diameter	25 + wetter + 2,4-DB (500g/L) 1.5-2.5L/ha	
Doublegee (Spiny Emex)	4 leaf	10cm diameter	25 + Uptake or wetter	
	6 leaf	15cm diameter	**Grazing Lucerne only** 50 + Uptake or wetter	Use the 50g/ha rate in grazing Lucerne only and apply from 4 trifoliate leaves onwards. DO NOT apply at 50g/ha to Lucerne intended for seed production. TITAN Flumetsulam 800 WG Herbicide + 2, 4-DB tank mixes – only use a wetter.
Marshmallow (Small Flowered Mallow)	5-8 leaf	10cm diameter	25 + Uptake or wetter	
New Zealand Spinach	4 leaf	5cm diameter		
Paterson's Curse (Salvation Jane)	8 leaf	10cm diameter		
Peppercress	10 leaf	15cm diameter		
Stagger Weed	6 leaf	5cm diameter	25 + wetter + 2,4-DB (500g/L) 1.5-2.5L/ha	
Wild Radish	4 leaf	5cm diameter	25 + Uptake or wetter	

TABLE 3A. DIURON TANK MIXES: WHEAT, BARLEY, OATS, TRITICALE, CEREAL RYE

Tank mixtures: Read all label directions including restraints, spray drift restraints, mandatory no-spray zones, critical comments, withholding periods, regional use restrictions and safety directions for the tank mix products.

CROP/SITUATION	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXED
Wheat	3 leaf until start of jointing (Zadoks 13-31)		Always apply with Uptake Spraying Oil at 500mL/100L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200mL/100L.
Barley Oats	Mid-tillering to start of jointing (Zadoks 13-31)	Transient stem shortening and crop discolouration may occur, although yields are normally unaffected. In severe cases yields may be suppressed.	Use only with a wetting agent such as BS-1000 when either applying TITAN Flumetsulam 800 WG Herbicide alone or with partner products in Barley and Oats.
Stirling Barley (WA only)	Apply no earlier than Zadoks 31		
Triticale Cereal Rye	Mid-tillering to start of jointing (Zadoks 13-31)		Always apply with Uptake Spraying Oil at 500mL/100L or a 100% concentrate non-ionic wetting agent such as BS-1000 at 200mL/100L.
SALVAGE SPRAY			
Cereals: Wheat Barley Oats Triticale Cereal Rye	Flowering (anthesis) to early dough (Zadoks 61-83)	DO NOT use more than 25g/ha.	

TABLE 3B. DIURON TANK MIXES: WEEDS CONTROLLED IN TABLE 3A CROPS

WEED	WEED GROWTH STAGE		RATE (g/ha)	CRITICAL COMMENTS
	Up to leaf no. or	Up to plant size (cm)		
Capeweed	4 leaf	10cm diameter	25 + wetter + 100mL/ha diuron (500g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.
Doublegee (Spiny Emex)	4 leaf	10cm diameter	25 + wetter + 100mL/ha diuron (500 g/L)	Optimum results are obtained in a competitive pasture. For best results follow up with moderate grazing two weeks after application. Larger plants and any affected by stress or grazing prior to treatment may re-grow and flower.

TABLE 4. AGRICULTURAL NON-CROP AREAS

WEED	WEED GROWTH STAGE	RATE g/ha	CRITICAL COMMENTS
Caltrop, Capeweed, Marshmallow (Small Flowered Mallow) (suppression), Paterson's Curse (Salvation Jane), Wild Radish	Rosette stage prior to running up to flower	**Spot spray:** 25g/100L	Apply to actively growing rosettes. To ensure complete coverage, spray to the point of runoff. Use Uptake Spraying Oil at 500mL/100L.

TABLE 5A. SEED CROPS (Tasmania only): SUBTERRANEAN CLOVER, RED CLOVER, WHITE CLOVER, ARROWLEAF CLOVER AND LUCERNE

CROP	GROWTH STAGES	CROP TOLERANCE	SPRAY ADDITIVES/TANK MIXES
Seed crops of Subterranean Clover, Red Clover, White Clover, Arrowleaf Clover, Lucerne	1 to 3 trifoliate leaves onwards	**DO NOT apply to Lucerne or Clover seed crops less than 8 weeks before flowering.** **DO NOT apply at 40g/ha to Lucerne intended for seed production.**	Use Uptake Spraying Oil at 500mL/100L or a wetting agent such as TITAN Wetter 1000 Wetting Agent at 200mL/100L. In **Clover and Lucerne**, TITAN Flumetsulam 800 WG Herbicide may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds.

TABLE 5B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 5A CROPS

WEED	WEED GROWTH STAGE	RATE g/ha	CRITICAL COMMENTS
WEEDS CONTROLLED			
Charlock	Up to 3½ leaf stage	25 + Uptake or wetter	Use Uptake Spraying Oil at 500mL/100L or wetting agent such as TITAN Wetter 1000 Wetting Agent at 200mL/100L.
Fat Hen, Lesser Swinecress, Mustards, Shepherd's Purse, Wild Radish, Wild Turnip	Beyond 3½ leaf stage and up to 10 leaf stage	40 + Uptake or wetter	
WEEDS SUPPRESSED			
Capeweed, Chickweed, Fumitory, Spurrey, Wireweed	Beyond 3½ leaf stage and up to 10 leaf stage	40 + Uptake or wetter	In **Clover and Lucerne**, seedlings of these weeds will be **suppressed** with TITAN Flumetsulam 800 WG Herbicide alone. In **Clover and Lucerne**, TITAN Flumetsulam 800 WG Herbicide may be tank-mixed with 2,4-DB and/or bromoxynil at their respective label rates for complete control of suppressed weeds. Only use a wetting agent at 200mL/100L with these tank mixes.

TABLE 6A: LUCERNE, MAIZE, PEANUTS AND PIGEON PEA

CROP	GROWTH STAGES	APPLICATION METHODS	SPRAY ADDITIVES/TANK MIXED	CROP TOLERANCE
Maize	Post-plant pre-emergence (PPPE)	Apply TITAN Flumetsulam 800 WG Herbicide after planting and before emergence of crop and weeds. Apply to moist soil only.	May be tank mixed with pendimethalin.	
	Post-emergent Up to 8 leaf stage		Apply with Uptake Spraying Oil at 500mL/100L spray volume or with a 100% concentrate non-ionic wetter such as TITAN Wetter 1000 Wetting Agent at 200mL/100L.	Some transitory crop yellowing and height suppression should be expected but yields will be unaffected.
Soybean	Pre-plant Incorporated (PPI)	Incorporate into the soil within 4 hours by making two passes in opposite directions using a combine with trailing harrows or similar equipment, to ensure thorough incorporation.	May be tank mixed with trifluralin or pendimethalin.	
	Incorporated By Sowing (IBS)	Ensure the planting operation is done within 4 hours of application, using a combine with trailing harrows or similar equipment, to ensure thorough incorporation.	May be tank mixed with trifluralin or pendimethalin.	
	Post-plant Pre-emergent (PPPE)	Apply TITAN Flumetsulam 800 WG Herbicide after planting and before emergence of crop and weeds. Apply to moist soil only.	May be tank mixed with pendimethalin.	
Lucerne	Post-emergent Up to 6 trifoliate leaf stage		**DO NOT** apply at 50g/ha to lucerne intended for seed production. Apply with Uptake Spraying Oil at 500mL/100L spray volume or with a 100% concentrate non-ionic wetter such as TITAN Wetter 1000 Wetting Agent at 200mL/100L.	
Peanuts	Post-emergent Up to 6 leaf stage			
Pigeon Pea (GM Cotton refuge; for green manure only – DO NOT harvest seed or grain.)	Post plant pre-emergence	Apply TITAN Flumetsulam 800 WG Herbicide after planting and before emergence of crop and weeds. Apply to moist soil only. Results will be improved by light irrigation or rain to incorporate.	May be tank mixed with trifluralin 480 or pendimethalin.	

TABLE 6B. WEEDS CONTROLLED OR SUPPRESSED IN TABLE 6A CROPS

WEED	WEED GROWTH STAGE	RATE g/ha	CRITICAL COMMENTS
WEEDS CONTROLLED			
Volunteer Cotton (including Roundup Ready® Cotton)	Pre-emergence	50	**Cotton** (including Roundup Ready Cotton) – may be banded (>40%) over the row or broadcast). **WEED CONTROL:** **Minimum spray volume 150L/ha for optimum results.** In pre-emergent situations use the higher rate for longer soil residual effect and better suppression of more tolerant weeds (see weeds suppressed). In post-emergent situations use 25g/ha on weeds up to 2 leaf stage and 50g/ha on larger weeds up to 4 leaf stage and where more residual control is required.
Annual Ragweed, Boggabri Weed, Fat Hen, Wild Radish (IBS and PPPE only)	Pre-emergent	25 or 50	
Caltrop, Fat Hen, Turnip Weed, Wild Radish	Post-emergent Up to 4 leaf	25 or 50 + Uptake or wetter	
WEEDS SUPPRESSED			
Black Pigweed, Bladder Ketmia, Caltrop, Cobbler's-pegs	Pre-emergent	25 or 50	
Annual Ground Cherry, Anoda Weed, Bladder Ketmia, Boggabri Weed, Fierce Thornapple (QLD only), Red Pigweed, Wild Gooseberry	Post-emergent Up to 4 leaf	25 or 50 + Uptake or wetter	

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

HARVESTING WITHHOLDING PERIODS
CHICKPEAS, FIELD PEAS, LENTILS, MAIZE, PIGEON PEA, PEANUTS AND SOYBEANS: NOT REQUIRED WHEN USED AS DIRECTED.
WINTER CEREALS: DO NOT HARVEST FOR 4 WEEKS AFTER APPLICATION.

GRAZING/STOCK FOOD WITHHOLDING PERIODS
CHICKPEAS, FIELD PEAS, LENTILS, PIGEON PEAS, PEANUTS, SOYBEANS, POPANY VETCH: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 4 WEEKS AFTER APPLICATION.
BARLEY, CEREAL RYE, OATS, TRITICALE, WHEAT, GRASS PASTURES: DO NOT GRAZE FOR 3 DAYS AFTER APPLICATION.
DO NOT CUT FOR STOCK FOOD OR HARVEST FOR SEED FOR 4 WEEKS AFTER APPLICATION.
MAIZE: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.
CLOVER, FENUGREEK, LATHYRUS, LUCERNE, MEDIC, SERRADELLA:
DO NOT GRAZE OR CUT FOR STOCK FOOD OR HARVEST FOR SEED FOR 3 DAYS AFTER APPLICATION.

EXPORT OF LIVESTOCK
When TITAN Flumetsulam 800 WG Herbicide is used as directed and the above WHPs for grazing and cutting for stock food are observed, livestock fed treated commodities are considered acceptable to slaughter for export. However, export requirements are subject to change. Consult your exporter for updated information about specific export market requirements before feeding treated animal feeds to livestock.

TITAN AG CROP PROTECTION

MINIMUM RECROPPING PERIODS

TITAN Flumetsulam 800 WG Herbicide is broken down in the soil by microbial activity. Warm, moist soil conditions favour highest microbial activity and quickest residue breakdown. For the recropping periods NNSW & QLD refers to summer dominant rainfall areas, where crops are grown on deep black earth soils (vertisols), with no impermeable sub-horizon in the top 30cm. SNSW, VIC, TAS, SA and WA refers to winter dominant rainfall areas on soils with no impermeable sub-horizon in the top 30cm. Also see the comments on **rainfall** and **soil type** below.

CROP	**Rate (g/ha)**	**Region**	
		NNSW, QLD	SNSW, VIC, TAS, SA, WA
Cereal Rye, Medics, Tritcale, Wheat, Maize or Soybeans	25 or 50	May be planted at any time after TITAN Flumetsulam 800 WG Herbicide application	May be planted at any time after TITAN Flumetsulam 800 WG Herbicide application
Barley, Chickpeas, Clover, Field Peas, Lucerne, Oats and Peanuts	25	3 months	3 months
	50	6 months	9 months
Sorghum or Sunflowers	25	6 months	–
	50	9 months	–
Cotton	25 or 50	24 months	–
Canola, Faba Beans, Fenugreek, Lathyrus, Lentils, Lupins, Serradella or Popany Vetch	25	6 months	9 months
	50	9 months	12 months

Rainfall – is required to maintain soil wetness for at least one week over the warm months to enable microbial degradation of herbicide residues to allow safe planting of sensitive crops. For SNSW, Victoria, Tasmania, SA and WA a minimum of 25mm and preferably 50mm or more rain must have fallen over the warm months of the year.
For NNSW and QLD a minimum of 50mm and preferably 100mm rain or more must have fallen over the warm months of the year.

Soil Type – on shallow, duplex, low organic matter soils with an impermeable sub-horizon within the root zone (30cm deep or less) and alkaline surface soil, sensitive crops should NOT be planted until 2 years after application of TITAN Flumetsulam 800 WG Herbicide at either 25 or 50 g/ha.

(For crops grown in NNSW and QLD on soils other than vertisols, call TITAN AG or your local reseller for more advice).

Where TITAN Flumetsulam 800 WG Herbicide residue carryover is suspected and susceptible crops are to be planted, test the treated area as follows:
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 a winter cereal.

Pot bioassy: 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. Do this test 4 to 6 weeks before desired planting date. If any herbicide symptoms are observed, only plant a cereal crop.

Canola and Cotton are highly sensitive to TITAN Flumetsulam 800 WG Herbicide and therefore are a good test species for a bioassay.

GENERAL INSTRUCTIONS

MIXING

Quarter fill the spray tank and add the required amount of TITAN Flumetsulam 800 WG Herbicide. Add the remaining water with the agitator running. Add Uptake* Spraying Oil or the wetting agent agent last. Maintain agitation during spraying. Only mix sufficient spray solution for immediate use and avoid storing.
When tank mixing: TITAN Flumetsulam 800 WG Herbicide should be added to the tank first, followed by wettable powders or other dry flowable formulations, suspension concentrates (flowables), aqueous concentrates (eg. Lontrel* Herbicide), emulsifiable concentrates (eg. Verdict* 520 Herbicide) and then add Uptake Spraying Oil or wetting agent last (if used).

APPLICATION

Apply TITAN Flumetsulam 800 WG Herbicide in 50 to 150 litres of water per hectare, through an accurately calibrated boom sprayer. For aircraft application apply TITAN Flumetsulam 800 WG Herbicide in no less than 30L/ha of water through accurately calibrated equipment. The product should be applied by an accurately calibrated ground rig or aircraft delivering medium quality spray based on BCPC specifications and in accordance with ASAE standard S-572. Best results are achieved where applications are made on warm (greater than 5°C), sunny days applying more than 50L/ha of total spray volume (preferably more than 75L/ha) and where spray coverage is maximised.

COMPATIBILITY

Always allow 7 days between application of a grass herbicide and TITAN Flumetsulam 800 WG Herbicide in Chickpeas and Field Peas.
In Lentils, adjuvant, broadleaf or grass herbicide, insecticide and foliar fertiliser tank mixes may result in transient height reduction, crop discolouration and delayed flowering, although yields are normally unaffected. However, stress conditions after application (eg. frost, drought) may lengthen the time needed for Lentils to recover and in years where a dry spring occurs, yields may be suppressed.
TITAN Flumetsulam 800 WG Herbicide is compatible with the following:

Adjuvants: Uptake* Spraying Oil, Hasten* Spray Adjuvant, TITAN Wetter 1000 Wetting Agent.

Broadleaf herbicides:		
Atrazine	Diuron (liquid or wettable powder)	Spinnaker® Herbicide
Betazone	Lontrel™ 750 SG Herbicide	Fluroxypyr
Bromoxynil	MCPA Amine	Pendimethalin
2,4-DB	MCPA Ester	Terbutryn
Diflufenican (Lentils and Field Peas only)	MCPA Sodium Salt	Picloram + MCPA
Diflufenican + Bromoxnil	Metsulfuron	Trifluralin

Grassweed herbicides:		
Clethodim (Lentils only)	Simazine	
Hoegrass® Selective Herbicide (Ryegrass only)	Trifluralin	
Paraquat	Clodinafop	Haloxyfop
Fenoxaprop (Wild Oats only)		

Insecticides: Dimethoate, Esfenvalerate (Lentils only), Chlorpyrifos, Omethoate

Fungicides (Lentils only): Carbendazim, Chlorothalonil, Dithane* Rainshield NEO Tec

Foliar Fertilisers: Broadacre zinc (Lentils only)

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CLEANING SPRAY EQUIPMENT

After using TITAN Flumetsulam 800 WG Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Drain the tank and clean any filters in the tank, pump, lines and nozzles.

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

To decontaminate: Before spraying sensitive crops (which include canola, cotton, faba beans, lupins, sorghum and sunflowers), wash the tank and rinse the system as above. Quarter fill the tank and add an alkali detergent (e.g. SURF*, Cold Water SURF Concentrate*, Dynamo Matic Concentrate*, OMO* or DRIVE* at 500mL/100L of water or the powder equivalent at 500g/100L) and circulate throughout the system for at least fifteen minutes. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow to drain. Chlorine based cleaners 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 watercourses.

TITAN AG CROP PROTECTION

RESISTANT WEEDS WARNING

GROUP **2** HERBICIDE

TITAN Flumetsulam 800 WG Herbicide is a broadleaf herbicide with no annual ryegrass activity and is a member of the triazolopyrimidine sulfonanilide (sulfonamide) group of herbicides. The product has the acetolactate synthase (ALS) inhibitor mode of action. For weed resistance management the product is a Group 2 herbicide. Some naturally occurring weed biotypes resistant to the product and other Group 2 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 2 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 minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or local TITAN AG representative.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Refer to MINIMUM RECROPPING PERIODS for crop rotation information.

Crops susceptible to TITAN Flumetsulam 800 WG Herbicide include but are not limited to canola, cotton, faba beans, lupins, sorghum and sunflowers.

DO NOT flood irrigate any treated crop or pasture for 48 hours after application.

Where other types of irrigation are used, for example sprinklers, DO NOT irrigate to the point of run-off for at least 48 hours after application.

DO NOT apply to waterlogged soils or if heavy rain is expected within 48 hours of application.

DANGEROUS TO AQUATIC PLANTS AND SUSCEPTIBLE CROPS.

DO NOT contaminate dams, waterways or drains with the product or its containers.

DO NOT apply under weather conditions, such as dead calm or excessive wind, or from spraying equipment producing small droplets that may cause spray to drift onto adjacent areas, particularly wetlands, waterbodies, watercourses, susceptible crops or land to be planted with susceptible crops.

PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under withholding periods.

Poisonous plants may become more palatable after spraying, therefore livestock should be kept out of the area until the plants have died down.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

STORAGE AND DISPOSAL

KEEP OUT OF REACH OF CHILDREN. Store in the closed original container in a securely locked dry, cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the packaging below 500mm 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 regulation. 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

Product will irritate the eyes. When handling the granules avoid contact with eyes. If product in eyes, wash it out immediately with water. Wash hands after use.

FIRST AID

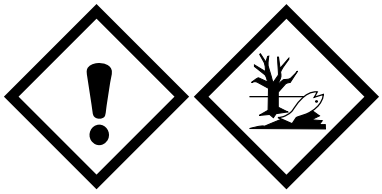
If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Flumetsulam 800 WG 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: Causes serious eye irritation. Very toxic to aquatic life. Precautionary Statements: Avoid release to the environment. Wear protective gloves, protective clothing, eye protection and face protection. Wash all exposed external body areas thoroughly after handling.IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.



TITAN AG CROP PROTECTION