READ SAFETY DIRECTIONS BEFORE OPENING OR USING

TITAN

DIFLUFENICAN 500

SELECTIVE HERBICIDE

ACTIVE CONSTITUENT: 500g/L DIFLUFENICAN

GROUP 12 HERBICIDE

For control of certain weeds in clover-based Pasture, Field Peas and Green Peas, Lentils, Lupins and Oilseed Poppy, Pyrethrum crops and Agricultural non-crop areas, commercial and industrial areas, pastures and rights-of-way as specified in the Directions For Use table.

APVMA Approval No.: 65492/125719

Pack Size: 5-20L

TITAN AG
CROP PROTECTION

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IN A TRANSPORT EMERGENCY
DIAL 000
POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING
NOT A DANGEROUS GOOD
ACCORDING TO THE AUSTRALIAN
DANGEROUS GOODS (ADG) CODE
FOR TRANSPORT BY ROAD AND RAIL

DIRECTIONS FOR USE

Restraints:

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.

DO NOT apply to crops under stress due to pre-emergence herbicide, root disease, insect damage, nutrient deficiency, excessively moist or dry conditions or extremes of pH.

DO NOT apply to frost affected crops or if frosts are imminent.

DO NOT apply if heavy rain is expected within 4 hours.

CROP	WEEDS CONTROLLED	STATE	WEED STAGE	RATE	CRITICAL COMMENTS
Clover based Pasture, Field Peas, Lentils, Lupins and Green Peas (including Snow Peas and Sugar Snap Peas)	Wild Radish (*Raphanus raphanistrum*)	WA only	Up to 2 leaf stage and not more than 60mm in diameter	100mL/ha	**CROP STAGE** Sow crop evenly to a depth of 20 to 50mm. **CLOVER-BASED PASTURE:** Apply post-emergence, not before the 3 trifoliate leaf stage. **Warning:** Some species and varieties of Clover may be more sensitive than others. Refer to legume tolerance table in the General Instructions. DO NOT apply to Medics or Yellow Serradella. **FIELD PEAS:** Apply early post-emergence after the third node stage and before the start of flowering. **Warning:** Field Peas grown on high pH soils in the presence of free lime may be less tolerant to TITAN Diflufenican 500 Selective Herbicide. **LENTILS:** Apply early post-emergence after the third node stage of the crop. **Warning:** Some Lentil varieties may be more sensitive than others. DO NOT apply to Northfield variety. Avoid spray overlap. **LUPINS:** **Post-emergence of Crop:** Apply post-emergence from the 2 leaf to the 6 leaf stage of crop (40 to 100mm high). **Post-sowing, Pre-emergence of Crop (Not WA):** Apply in a tank mix with the recommended rate of post-sowing pre-emergence treatment of simazine. (TITAN Diflufenican 500 Selective Herbicide should NOT be incorporated). **APPLICATION AND WEED CONTROL** Apply when weeds are actively growing. For optimum results apply 4 to 6 weeks post-sowing. Application beyond 8 week post-sowing may result in reduced levels of weed control. In most situations the rate specified for each weed size will give satisfactory control. Under certain conditions such as: • High crop and weed density • Last season germinations • Abnormal weed growth (including early flowering) Higher rates of product (up to the maximum rate of application specified for that weed) may be required. TITAN Diflufenican 500 Selective Herbicide will NOT effectively control: • Regrowth of suppressed weeds • Transplanted weeds • Regrowth from rhizomes or roots • Weeds growing under stress from previous herbicide applications The level of effective residual control may be reduced where: • Rates lower than 200mL/ha are used • Dry conditions prevail • Poor coverage of the soil surface is achieved • Crop is planted in non-wetting sand • Soils have a high content of clay or organic matter Where weeds are present at application, good spray coverage of the weeds is important. Apply before the crop canopy obscures weeds. Weed control may be reduced in areas where trash or burnt straw from previous harvest is dense, such as in header trails. Best results will be obtained if good soil moisture exists at and after application. **GREEN PEAS** **Post-emergence of Crop**: Apply early post-emergence after the third node stage of the crop and before the start of flowering. **Post-sowing/pre-emergence of Crop:** Apply only to a seedbed with fine tilth and no clods. (DO NOT incorporate into the soil.) **Warning:** Green Peas grown on high pH soils in the presence of lime may be less tolerant to diflufenican.
			Up to 4 leaf stage and not more than 120mm in diameter	150mL/ha	
			Up to 6 leaf stage and not more than 180mm in diameter	200mL/ha	
		NSW, ACT, VIC, TAS, SA only	Up to 4 leaf stage and not more than 120mm in diameter		
	Hedge Mustard (*Sisymbrium officinale*), Indian Hedge Mustard (*Sisymbrium orientale*), Wild Turnip (*Brassica tournefortii*)	WA only	Up to 2 leaf stage and not more than 60mm in diameter	100mL/ha	
		NSW, ACT, VIC, TAS only	Up to 4 leaf stage and not more than 120mm in diameter	150mL/ha	
		SA, WA only	Up to 6 leaf stage and not more than 180mm in diameter	200mL/ha	
	Turnip Weed (*Rapistrum rugosum*)	NSW, ACT, VIC, TAS, SA, WA only	Up to 4 leaf stage and not more than 120mm in diameter		
	Charlock (Wild Mustard) (*Sinapis arvensis*), Deadnettle (*Lamium amplexicaule*)	NSW, ACT, VIC, TAS, SA only			
	Prickly Lettuce (*Lactuca serriola*)		Up to 2 leaf stage and not more than 60mm in diameter		
	Pheasants Eye (*Adonis microcarpa*)	SA only			
	Capeweed (*Arctotheca calendula*), Crassula (*Crassula* spp.), Corn Gromwell (*Buglossoides arvense*), Marshmallow (*Malva parviflora*), Shepherd's Purse (*Capsella bursa-pastoris*)	NSW, ACT, VIC, TAS, SA, WA only	Up to 4 leaf stage and not more than 120mm in diameter	200mL/ha	

TITAN AG CROP PROTECTION

CROP	WEEDS CONTROLLED	STATE	WEED STAGE	RATE	CRITICAL COMMENTS
Clover based Pasture, Field Peas, Lentils, Lupins and Green Peas (including Snow Peas and Sugar Snap Peas) – *cont.*	Chickweed (*Stellaria media*), Hyssop Loosestrife (*Lythrum hyssopifolia*), Mouse-eared Chickweed (*Cerastium glomeratum*), Night-scented Stock (*Matthiola longipetala*), Skeleton Weed (*Chondrilla juncea*), Speedwell (*Veronica hederifolia*)	NSW, ACT, VIC, TAS, SA only	Up to 4 leaf stage and not more than 120mm in diameter	200mL/ha	**CROP STAGE** Sow crop evenly to a depth of 20 to 50mm. **CLOVER-BASED PASTURE:** Apply post-emergence, not before the 3 trifoliate leaf stage. **Warning:** Some species and varieties of Clover may be more sensitive than others. Refer to legume tolerance table in the General Instructions. DO NOT apply to Medics or Yellow Serradella. **FIELD PEAS:** Apply early post-emergence after the third node stage and before the start of flowering. **Warning:** Field Peas grown on high pH soils in the presence of free lime may be less tolerant to TITAN Diflufenican 500 Selective Herbicide. **LENTILS:** Apply early post-emergence after the third node stage of the crop. **Warning:** Some Lentil varieties may be more sensitive than others. DO NOT apply to Northfield variety. Avoid spray overlap. **LUPINS:** **Post-emergence of Crop:** Apply post-emergence from the 2 leaf to the 6 leaf stage of crop (40 to 100mm high). **Post-sowing, Pre-emergence of Crop (Not WA):** Apply in a tank mix with the recommended rate of post-sowing pre-emergence treatment of simazine. (TITAN Diflufenican 500 Selective Herbicide should NOT be incorporated). **APPLICATION AND WEED CONTROL** Apply when weeds are actively growing. For optimum results apply 4 to 6 weeks post-sowing. Application beyond 8 week post-sowing may result in reduced levels of weed control. In most situations the rate specified for each weed size will give satisfactory control. Under certain conditions such as: • High crop and weed density • Last season germinations • Abnormal weed growth (including early flowering) Higher rates of product (up to the maximum rate of application specified for that weed) may be required. TITAN Diflufenican 500 Selective Herbicide will NOT effectively control: • Regrowth of suppressed weeds • Transplanted weeds • Regrowth from rhizomes or roots • Weeds growing under stress from previous herbicide applications The level of effective residual control may be reduced where: • Rates lower than 200mL/ha are used • Dry conditions prevail • Poor coverage of the soil surface is achieved • Crop is planted in non-wetting sand • Soils have a high content of clay or organic matter Where weeds are present at application, good spray coverage of the weeds is important. Apply before the crop canopy obscures weeds. Weed control may be reduced in areas where trash or burnt straw from previous harvest is dense, such as in header trails. Best results will be obtained if good soil moisture exists at and after application. **GREEN PEAS** **Post-emergence of Crop**: Apply early post-emergence after the third node stage of the crop and before the start of flowering. **Post-sowing/pre-emergence of Crop:** Apply only to a seedbed with fine tilth and no clods. (DO NOT incorporate into the soil.) **Warning:** Green Peas grown on high pH soils in the presence of lime may be less tolerant to diflufenican.
	Amsinckia (*Amsinckia* spp.), Wireweed (*Polygonum aviculare*)	NSW, ACT, VIC, TAS, SA only	Up to 2 leaf stage and not more than 60mm in diameter		
	Paterson's Curse (Salvation Jane) (*Echium plantagineum*), Rough Poppy (*Papaver hybridum*)	NSW, ACT, VIC, SA only	Up to 2 leaf stage and not more than 60mm in diameter		
	Sorrel (*Rumex acetosella*), Toad Rush (*Juncus bufonius*)	NSW, ACT, VIC, TAS, SA only			
	Stinging Nettle (*Urtica urens*)	NSW, ACT only	Cotyledon stage		
Oilseed Poppy	Charlock (*Sinapis arvensis*), Hedge Mustard (*Sisymbrium officinale*), Indian Hedge Mustard (*Sisymbrium orientale*), Wild Radish (*Raphanus raphanistrum*), Wild Turnip (*Brassica tournefortii*)	TAS only	Early post-emergence up to the 4 leaf stage and not more than 120mm in diameter	150mL/ha (4-6 leaf crop stage) and/or 200mL/ha (6-10 leaf crop stage)	**CROP STAGE** TITAN Diflufenican 500 Selective Herbicide may be mixed with Reglone or Asulox based on recommendations from poppy contracting companies. DO NOT use in mixtures with Tramat*. **APPLICATION AND WEED CONTROL** See comments on Clover-based Pastures, Field Peas, Lentils and Lupins.

TITAN AG CROP PROTECTION

CROP	WEEDS CONTROLLED	STATE	WEED STAGE	RATE	CRITICAL COMMENTS
Pyrethrum (*Tanacetum cinerariifolium*) crops	Hawkbit, Dandelion, Cats Ear, Wild Turnip (*Brassica tournefortii*), Wild Radish (*Raphanus raphanistrum*), Shepherd's Purse (*Capsella bursa-pastoris*)	VIC, TAS, SA only		100-300mL/ ha	DO NOT apply more than 100mL/ha pre-emergent. Apply post-emergent after 2-true leaf stage.
Agricultural non-crop areas, commercial and industrial areas, pastures and rights-of-way	Toxic Pimelea species (Desert Riceflowers, Flaxweed)			250mL/ha plus wetter or 17mL per 100L water plus wetter	To be applied when plant is green. Apply by boomspray in a volume of 1000L/ha. For spot spray thoroughly wet all foliage to the point of run-off (approx. 1500L/ha spray volume). DO NOT apply more than 2 applications per year with a minimum re-treatment interval of 21 days between consecutive applications. Avoid applying consecutive sprays of this herbicide. Repeated use of herbicides with the same mode of action can lead to development of resistance. The applications could be used in creating and maintaining hospital areas for livestock suffering from Pimelea poisoning. **Warning:** Pimelea may become more attractive to stock after treatment. Stock should be excluded from treated areas until sprayed Pimelea plants are leafless, seedless and obviously dead.

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

WITHHOLDING PERIODS:
Pyrethrum: DO NOT HARVEST FOR 20 WEEKS AFTER APPLICATION.
Agricultural non-crop areas, commercial and industrial areas, grass pastures and rights-of-way: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.
For other crop uses: NOT REQUIRED WHEN USED AS DIRECTED.

GENERAL INSTRUCTIONS
For use as an early post-emergence spray in clover-based pasture, Field Peas, Green Peas, Lentils and Lupins. May also be used as a post-sowing pre-emergence spray on Lupins and Green Peas.
TITAN Diflufenican 500 Selective Herbicide may also be used as a pre-emergence spray on Lupins in NSW, ACT, VIC, SA and TAS. This product provides both contact and residual activity. Residual activity can be expected for up to 8 weeks after application under favourable growing conditions.
This product is taken up by the shoots of germinating seeds and seedlings. Susceptible weeds germinate but show immediate chlorosis followed by a mauve-pink discolouration. The chlorosis spreads with the aerial growth and the plants become necrotic and die back.
After application, some transient crop discolouration may occur. In Lentils and Lupins, this usually appears as yellow or white banding on the leaves, while in Clover and Field Peas, white/pink colouration of the leaf veins and tips may occur. Some crop height reduction may also occur.
Provided the crop is not under stress from pre-emergent herbicide, disease, insect damage, nutrient deficiency, frost, extremes of pH, dry or excessively moist conditions, the development of the crop and all subsequent growth will not be affected. Some pre-emergence herbicides, such as atrazine, can cause stress to certain crops resulting in an increase in crop damage when using this product. Field Peas are particularly sensitive.

CLOVER TOLERANCE TABLE

VARIETY	EFFECT ON VEGETATIVE GROWTH
Arrowleaf (Zulu)	Moderate
Balansa (Paradana)	Moderate
Persian (Kyambro)	Minimal
Strawberry (Palestine)	Moderate
Subterranean (Clare)	Moderate
Subterranean (Junee)	Moderate
Subterranean (Karridale)	Moderate
Subterranean (Larissa)	Moderate
Subterranean (Mt Barker)	Moderate
Subterranean (Seaton Park)	Minimal
Subterranean (Trikkala)	Minimal
Subterranean (Woogenellup)	Moderate
White (Haifa)	Moderate

Reduction in growth – Minimal (0-20%), Moderate (20-50%)

The following varieties of Subterranean Clover have been tested for effects on seed yield: Seaton Park, Trikkala and Woogenellup. Some reduction in seed yield may occur with cv. Trikkala.

Subsequent Crop Tolerance: To reduce the effect on subsequent susceptible crops (eg. Canola), ensure thorough cultivation of soil prior to the sowing of these crops.

MIXING
Stir product or invert container several times before use as settling may occur after storage for some weeks. To ensure even mixing, half fill the spray tank with clean water and add the required amount of product. Agitate thoroughly then add the remainder of the water. Agitate thoroughly while carrying out spray operations. Reseal part-used container immediately after use.

APPLICATION
Ground: A minimum water rate of 50L/ha should be used, however, for optimum results water rates of 70-100L/ha are recommended. Increase the water volume where weed infestation is heavy or the crop cover is dense. Complete coverage of weeds is essential. Higher water volumes (up to 100L/ha) will ensure improved activity of the product on the weeds but may increase the symptoms of crop damage. The following settings are examples that will ensure excellent coverge of exposed weeds:

WATER RATE	50L/ha	75L/ha	75L/ha
NOZZLE	Hardi No. 10 or equivalent	Hardi No. 12 or equivalent	Hardi No. 14 or equivalent
SPEED	10 KpH	10 KpH	12 KpH
PRESSURE	240 KpA (2.4 bar)	220 KpA (2.2 bar)	210 KpA (2.1 bar)

COMPATIBILITY
TITAN Diflufenican 500 Selective Herbicide is physically compatible with most currently registered grass herbicides as two-way tank mixtures.

TITAN Diflufenican 500 Selective Herbicide	COMPATIBLE PRODUCT
Up to 150mL	Simazine (500g/L product) up to 1.0L/ha
All rates	Decis EC*, Dimethoate formulations, Alpha-Cypermethrin* 100 Insecticide, Karate*, Le-Mat 290 SC*, Metribuzin, Talstar* and Haloxyfop

TITAN AG CROP PROTECTION

Warning: For tank-mixtures with grass herbicides, use the recommended rates for both herbicides as well as the surfactant recommendations of the grass herbicide. Read the label for the grass herbicide before mixing and using the tank mixtures. DO NOT use crop oils with TITAN Diflufenican 500 Selective Herbicide or TITAN Diflufenican 500 Selective Herbicide/grass herbicide tank mixtures. Applications to Lupins and Field Peas under stressed conditions may cause significant damage to the crop. Tank-mixes with simazine should be applied post-emergence to Lupins crops only. Increased crop effects may be experienced with the tank mix. DO NOT apply tank-mixtures to Clover.

When tank-mixing TITAN Diflufenican 500 Selective Herbicide and quizalofop-p-ethyl, use a surfactant only. Mixtures of TITAN Diflufenican 500 Selective Herbicide and Haloxyfop applied to Lupins or Field Peas can cause damage which may result in yield losses. Consult your local TITAN AG representative or the relevant grass herbicide manufacturer for advice on application and timing of tank-mixtures. As formulations of other manufacturers' products are beyond the control of TITAN AG Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

RESISTANT WEEDS WARNING

GROUP **12** HERBICIDE

TITAN Diflufenican 500 Selective Herbicide is a member of the Nicotinanalide group of herbicides. The product has the inhibitors of carotenoid biosynthesis mode of action. For weed resistance management the product is a group 12 herbicide. Some naturally occurring weed biotypes resistant to the product and other Group 12 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 12 herbicides.
Since the occurrence of resistant weeds is difficult to detect prior to use, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping land or pastures.

STORAGE AND DISPOSAL

KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a cool, dry, well-ventilated area, out of 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 a designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SAFETY DIRECTIONS

Avoid contact with eyes and skin. 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 Diflufenican 500 Selective Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9999 6655 or visit www.titanag.com.au

CONDITIONS OF SALE: TITAN AG Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG's skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

TITAN AG CROP PROTECTION