

Product Name: Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide
APVMA Approval No: 92666/142550



Label Name:	Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide
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Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	10 g/L AMINOPYRALID PRESENT AS TRIISOPROPANOLAMINE SALT 140 g/L FLUROXYPYR-MEPTYL 406 g/L LIQUID HYDROCARBON
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Mode of Action:	GROUP 4 HERBICIDE
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Statement of Claims:	For the control of climbing buckwheat and other broadleaf weeds in winter cereals, lantana and certain other pasture weeds.
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Net Contents:	5 L - 1000 L
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Restraints:	<p>RESTRAINTS:</p> <p>DO NOT apply to weeds which are not actively growing or to plants which may be stressed (not actively growing) due to prolonged periods of extreme cold, moisture stress (waterlogged or drought affected) or previous herbicide treatment, as crop damage or reduced levels of control may result.</p> <p>DO NOT spray if rain is likely to occur within one hour. AVOID double overlaps to reduce risk of injury to rotational crops the following season.</p> <p>DO NOT apply by aerial application.</p> <p>DO NOT apply by a boom sprayer unless spray droplets are not smaller than medium spray droplet size category.</p> <p>SPRAY DRIFT RESTRAINTS</p> <p>Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift</p> <p>DO NOT allow bystanders to come into contact with the spray cloud.</p> <p>DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops,</p>
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	<p>landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.</p> <p>DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.</p> <p>DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.</p>
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Directions for Use:	This section contains file attachment.
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Other Limitations:	
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Withholding Periods:	<p>Withholding Periods</p> <p>Cereals (Barley, Oats Triticale and Wheat):</p> <p>Harvest: NOT REQUIRED WHEN USED AS DIRECTED.</p> <p>Cutting or Grazing for Stockfood: DO NOT GRAZE OR CUT CROPS FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.</p> <p>Pasture: Cutting or Grazing Pastures for Stockfood: NOT REQUIRED WHEN USED AS DIRECTED. Fodder Intended for Export: Some countries have limits on the level of residue acceptable in animal feeds. Please consult your exporter before using this product on crops destined to be used for export fodder.</p>
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Trade Advice:	<p>LIVESTOCK DESTINED FOR EXPORT MARKETS</p> <p>The grazing withholding period only applies to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that in addition to complying with the grazing withholding period, that the Export Slaughter Interval, Export Grazing Interval or Export Animal Feed Interval is observed before stock are sold or slaughtered. EXPORT SLAUGHTER INTERVAL (ESI) – 3 days: After observing the grazing withholding period, livestock that has been grazed on or fed treated pasture should be placed on clean feed for 3 days prior to slaughter.</p> <p>EXPORT GRAZING INTERVAL (EGI) – 42 days: Livestock that has been grazing on treated pasture should not be sold for export slaughter for 42 days (6 weeks) after application of the chemical product, unless the export slaughter interval has been observed.</p> <p>EXPORT ANIMAL FEED INTERVAL (EAFI) – 42 days: Do not cut treated pasture for 42 days (6 weeks) after application of the chemical product for stock feed or animals intended to be slaughtered for export. When Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide is used as directed and the above withholding periods and/or export intervals are observed, treated grain and livestock commodities are considered acceptable for export. However, export requirements are subject to change. Consult your exporter for updated information about specific market requirements.</p> <p>IMPORTANT: Read the MANAGEMENT OF RESIDUES IN COMPOST, MULCHES AND ANIMAL WASTE in the PROTECTION OF CROPS, NATIVES AND OTHER NONTARGET PLANTS section of this label</p>
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>RESISTANCE WEEDS WARNING</p> <p>GROUP 4 HERBICIDE</p> <p>Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide contains members of the pyridine 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 disrupters of plant cell growth 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 disrupters of plant cell growth herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Titan Ag Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or local Titan Ag representative.</p>
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Precautions:	<p>Re-entry statement for the general public DO NOT allow entry into treated areas until the spray has dried.</p> <p>Re-entry statement for occupational users DO NOT enter treated areas until spray has dried. If prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.</p>
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Protections:

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

PROTECTION OF CROPS, NATIVES AND OTHER NON-TARGET PLANTS DO NOT use on land to be cultivated for growing susceptible crops for up to 20 months of applying Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide , except where indicated in the MINIMUM RECROPPING PERIODS section of the GENERAL INSTRUCTIONS. Legumes, vines, vegetables, cotton, tomatoes, ornamentals and many other plants are highly susceptible to this herbicide during both growing and dormant periods. Cereal crops, canola and grasses can be sown safely after using Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide. This product will kill legumes (clovers, medics) present in the crop at the time of spraying. In the season, following application of this product the regeneration or establishment of sensitive legumes (clover, medics, peas, and lupins) may be adversely affected by soil residues. DO NOT allow spray drift onto sensitive native vegetation or susceptible crops, such as cotton, tomatoes, vines, fruit, potatoes, vegetables, ornamentals, tobacco, lupins and other legumes, safflower, sugar beet, hops, flowers or shade trees. DO NOT apply close to or on areas containing roots of desirable vegetation, where treated soil may be washed to areas growing, or to be planted to desirable plants, or on sites where surface water from heavy rain can be expected to run off to areas containing or to be planted to susceptible crops or plants. DO NOT move soil, which may have been sprayed, to areas where desirable plants are to be grown.

MANAGEMENT OF RESIDUES IN COMPOST, MULCHES AND ANIMAL WASTE
DO NOT cut pasture for hay or silage production within 6 months of application, where it is intended for use off-farm. DO NOT cut cereals intended for hay or silage production within 6 weeks of application, where it is intended for use off-farm. DO NOT use treated plant material to make compost, mulches or mushroom substrate. DO NOT send straw from treated crops off-farm for these purposes or for animal bedding. DO NOT send animal manure, dairy shed and feed pad effluent that has been collected from animals grazing or fed crops treated within the previous 6 months (pasture) or 6 weeks (cereals) off-farm. Spreading/irrigating this manure/effluent may cause damage to clover and other susceptible plants. DO NOT send compost made from animal waste that has been collected from animals grazing or fed crops treated within the previous 6 months (pasture) or 6 weeks (cereals) off-farm. Such compost may cause damage to clover and other susceptible plants. DO NOT apply animal waste (e.g. manure, slurry) collected from animals grazing or fed crops treated within the previous 6 months (pasture) or 6 weeks (cereals) to susceptible plants or land to be used to grow susceptible plants. DO NOT grow susceptible plants within in the relevant plantback period in fields treated with manure/effluent from farms where animals have grazed or been fed treated plants until a field bioassay shows there are no residues in the soil at levels injurious to the susceptible plants (see the crop rotation section). • To promote herbicide decomposition, manure should be evenly incorporated in the surface soil. Breakdown of residues in decomposing plants or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.

SOIL BIOASSAY

A simple bioassay can be conducted by collecting at least 10 spade spits of soil to a depth of 200 mm from around the paddock and thoroughly mixing the soil together. Place some of this soil in a shallow container to a depth of 3-5 cm and sow 100 seeds of the susceptible plant to be grown (subterranean or white clover is a good indicator plant where it is not practical to use the susceptible plant) into the soil. Keep in a warm and well lit location and ensure the soil does not dry out. After crop emergence, check the number of plants that have germinated and seedling vigour. Symptoms of Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide residues include non-germination or low plant emergence, leaf cupping, leaf whitening, stem elongation and twisting. If these symptoms occur – do not grow the susceptible plant. Repeat the bioassay again after a further time interval. Further information on residues in composts, mulches and animal wastes can be found at www.titanag.com.au

Storage and Disposal:	<p>STORAGE AND DISPOSAL</p> <p>Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT store near food, feedstuffs, fertilisers or seed. The method of disposal of the container depends on the container type. Read the STORAGE AND DISPOSAL instructions on the label that is attached to the container. 5, 10 and 20L containers. This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple or pressure rinse container for disposal. Dispose of rinsate by adding to the spray tank. Do not dispose of undiluted chemicals on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management site. The cap should not be replaced but may be taken separately. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm 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. 100L and 110L containers Do not tamper with the dry valves or security seal. Do not contaminate the drum with water or any other foreign matter. After each use of the product ensure that the dry valve coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained. Add the rinsings to the spray tank. When the drum is empty close all valves and return to the point of purchase. The drum remains the property Titan Ag Pty Ltd and must be returned.</p> <p>1000L containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
	<p>SPILL AND LEAK MANAGEMENT</p> <p>Do not touch or walk through spilled material. Wear a face shield or goggles, overalls buttoned to neck and wrist, chemical resistant gloves and footwear. Stop leak when safe to do so. Dam area and prevent entry into waterways, and drains. Small spills/leaks: Absorb with material such as sand, soil or sawdust. Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. Dam the area of large spills and report them to Titan Ag Pty Ltd at 02 9999 6655.</p>

Safety Directions:	<p>SAFETY DIRECTIONS</p> <p>Will irritate the skin. Will damage eyes. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat and elbow length chemical resistant gloves. In addition, when mixing and loading wear face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.</p>
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First Aid Instructions:	<p>FIRST AID</p> <p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone: Australia 13 1126. New Zealand 0800 764 766.</p> <p>If swallowed, do NOT induce vomiting. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.</p>
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First Aid Warnings:	
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GENERAL INSTRUCTIONS

MINIMUM RECROPPING PERIODS

Aminopyralid remains active in the soil for extended periods depending on rate of application, soil type (clay content), rainfall, temperature, humidity, soil moisture and soil organic matter. The following tables show plant-back periods to particular crops following application of Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide in different areas in Australia.

Northern New South Wales & Queensland

Plant-back periods for rotational crops following application of Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide for rates up to 750 mL/ha on black cracking clay soils. These plant-back periods are based on normal rainfall pattern. During drought conditions (or when rainfall is less than 100 mm for a period of 4 months or greater) the plant-back period may be significantly longer.

Winter Crop	Plant-back Period (months)	Summer Crop	Plant-back Period (months)
Wheat	4	Sorghum	3
Barley	4	Mungbean	5
Canola	4	Sunflower	5
Chickpea	6	Soybean	5
Faba bean	6	Cotton	9
Lucerne	6		

Southern New South Wales, Victoria, South Australia & Western Australia

Plant-back periods for rotational crops following application of Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide for rates up to 500 mL/ha.

Crops	Plant-back Period (months)
Barley, Canola, Wheat	9
Chickpea, Faba bean, Field pea, Lucerne, Lupin, Medic, Subclover	20

Note: Before using Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide in tank mixes with other herbicides, check the plant-back information on all product labels. The most residual product, i.e. the product with the longest plant-back period, will determine the time between spraying and planting the next crop.

MIXING • Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide can be mixed with water only. • Mix only sufficient chemical for each day use and avoid storing mix. • Half fill the spray tank with water and add the required quantity of Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide and complete filling. Agitate continuously to ensure thorough mixing before and during application.

Tank mixtures: Wettable powder or dry flowable formulations (e.g. water dispersible granules) should be added to the spray tank first, followed by suspension concentrates (flowables), water soluble salts and then emulsifiable concentrate formulations (e.g. Titan Fluroxypyr 333 EC

Herbicide). Add spraying oils and surfactants (wettters) last, if required.

APPLICATION METHODS

Broadcast application in cropping situations.

A. Ground Application (Boom)

- Apply Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide with an accurately calibrated boom sprayer, in at least 80L/ha water.
- Set the boom at a height to ensure a double overlap of the nozzle pattern.

Woody weed situations

A. High Volume Spot Spraying Application

- Apply the recommended mix to obtain full coverage of leaves and stems using a coarse to very coarse quality spray eg a number 6 – 8 spray tip at 700 to 1500 kPa. To obtain good coverage, a spray volume of 3000 L water/ha is required per treated hectare.
- Spray to ensure thorough coverage of all foliage, including stems to the point of runoff.

CLEANING SPRAY EQUIPMENT

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto wasteland away from desirable plants and water courses. Rinsing: After using Titan Fluroxypyr 140 + Aminopyralid 10 EC Herbicide, empty the tank completely and drain the whole system. Thoroughly wash inside the spray unit using a pressure hose. Drain, and clean any filters in the tank, pump, lines, hoses and nozzles. After cleaning the tank as above, quarter fill with clean water and circulate through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.

Decontamination (before spraying cotton and other sensitive crops; see PROTECTION OF CROPS,

NATIVES AND OTHER NON-TARGET PLANTS): Wash the tank and rinse the system as above. Then quarter fill the tank and add a standard alkali based laundry detergent at 500g (or mL)/100 L water and circulate throughout the system for at least 15 minutes. If using a concentrated laundry detergent use 250g (or mL)/100 L water. Do not use chlorine based cleaners. Drain the whole system. Remove filters and nozzles and clean them separately. Finally flush the system with clean water and allow draining.

DIRECTIONS FOR USE

Table 1: Northern New South Wales and Queensland

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE /ha	CRITICAL COMMENTS
Barley, Oats, Triticale, Wheat	Apply from 3 leaf to first node (Z13 to Z31)	Wheat	Seedling up to 2-4 leaf	500 mL	
		Climbing buckwheat (Fallopia convolvulus) (black bindweed)	Seedling up to 6-8 leaf	750 mL	
		Prickly lettuce (Lactuca serriola) Vetch (Vicia sativa) Volunteer chickpea (Cicer arietinum) Volunteer faba bean (Vicia faba) Volunteer field pea (Pisum sativum)	Seedling up to 4 leaf		
		Common sowthistle (Sonchus oleraceus) Deadnettle (Lamium amplexicaule) Wireweed (Polygonum aviculare)		500 – 750 mL + 5 g Titan Metsulfuron 600	DO NOT USE in oats. Add TITAN WETTER 1000 WETTING AGENT or an alternative (see compatibility section) at the rate of 100 mL/100 L water. Note: this mixture will also control non ALS resistant weeds such as mustards, turnip weed, volunteer canola and wild turnip.
		Flax-leaf fleabane (Conyza bonariensis)		750 mL + 5g Titan Metsulfuron 600	
	Apply from 4 leaf to first	Common sowthistle (Sonchus oleraceus)		500 – 750 mL +	Use the higher rate of TITAN LVE MCPA 570 HERBICIDE

	node (Z14 to Z31)	Spiny emex (Emex australis) Variegated thistle (Silybum marianum)		442 or 610 mL TITAN LVE MCPA 570 HERBICIDE	only from 5 leaf cereal growth stage onwards. Mustards, turnip weed, volunteer canola and wild turnip will also be controlled.
		Flax-leaf fleabane (Conyza bonariensis)		750 mL + 580 mL LVE 600 MCPA	
Wheat	Apply from 3 leaf to first node (Z13 to Z31)	Wild oats (Avena sterilis ssp. ludoviciana) (Avena fatua) (non 'fop' resistant)	2 to 4 leaf	500 – 750 mL + 85 mL TITAN CLODINAFOP 240 EC HERBICIDE	Add Titan PARAFFINIC SPRAYING OIL at the rate of 500 mL/100 L water

Table 2: Northern New South Wales and Queensland.

SITUATION	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE /ha	CRITICAL COMMENTS
Fallow	Climbing buckwheat (Fallopia convolvulus) Red pigweed (Portulaca oleracea)	Seedling up to 4 leaf	500 mL + Titan Glyphosate 450	When mixing with Titan Glyphosate 450 to control both grass and broadleaf weeds, refer to the Ripper 480 label for use rates and adjuvants recommended for the grasses.

Table 3: Southern New South Wales, Victoria, South Australia and Western Australia

CROP	CROP GROWTH STAGE	CONTROLLED WEED	WEED GROWTH STAGE	RATE /ha	CRITICAL COMMENTS
Barley, Oats, Triticale, Wheat	Apply from 3 leaf to first node (Z13 to Z31)	Volunteer faba bean Volunteer field pea Volunteer lupin Volunteer vetch	Seedling up to 4 leaf	500 mL	DO NOT plant susceptible crops for up to 20 months after application, as specified in GENERAL INSTRUCTIONS - MINIMUM RECROPPING PERIODS.

Table 4: Woody Weed Situations – High Volume Treatment/Spot Spray AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, FORESTS, PASTURES AND RIGHTS-OF-WAY

WEEDS CONTROLLED	WEED GROWTH STAGE	STATE	RATE /100 L Water	CRITICAL COMMENTS	
Fireweed (Senecio madagascariensis)	Flowering plants up to 30 cm tall	All States	500 mL		
Thistles, including Spear thistle (Cirsium vulgare)	Rosette stage prior to stem elongation				
Lantana (Lantana camara)	Seedlings and regrowth from 0.5 to 1.2 m high		700 mL	Apply to actively growing plants from October to April. Spray to ensure thorough coverage of all foliage, including stems, to the point of runoff.	
	Mature plants and regrowth from 1.2 to 2m high				
Cockspur thorn (Maclura cochinchinensis)	Up to 3 m high	All States			
Creeping lantana (Lantana montevidensis)	At flowering				
Crofton weed (Ageratina adenophora) Mistflower (Ageratina riparia)	Seedlings and young plants up to flowering				
Docks (Rumex spp.)	Seedlings and rosettes up to 30 cm high				
Small flowered mallow (Marshmallow) (Malva parviflora)	Seedlings and young plants up to flowering				

St. John's wort (<i>Hypericum perforatum</i>)	From flowering to early seed set			Late spring to early summer
Wattles, including <i>Acacia aulacocarpa</i> <i>A. decora</i> <i>A. harpophylla</i> <i>A. leiocalyx</i> <i>A. salicina</i>	Seedling plants or regrowth 0.5 to 1.2 m high			Apply to actively growing plants when soil moisture is plentiful. Some regrowth may occur particularly when treating old woody plants with sparse canopies and under dry conditions.

Table 5: Woody Weed Situations – Boom Application

AGRICULTURAL NON-CROP AREAS, COMMERCIAL AND INDUSTRIAL AREAS, PASTURES AND RIGHTS-OF-WAY

WEEDS CONTROLLED	WEED GROWTH STAGE	RATE /ha	CRITICAL COMMENTS
Fireweed (<i>Senecio madagascariensis</i>)	Seedling plants up to flowering	1.5 L	Legumes present at application will be controlled.

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