

Product Name: TITAN Aminopyralid 240 SL Herbicide
APVMA Approval No. 94861/143883

Label Name:	TITAN Aminopyralid 240 SL 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:	ACTIVE CONSTITUENT: 240g/L AMINOPYRALID present as the TRIISOPROPANOLAMINE SALT
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Mode of Action:	GROUP 4 HERBICIDE
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Statement of Claims:	For control of black bindweed/climbing buckwheat in wheat and barley
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Net Contents:	1 L - 1000 L
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Restraints:	This section contains file attachment.
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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>For tank mixtures other than those listed below, observe the WHP and/or export intervals for the partner product if longer than those for TITAN Aminopyralid 240 SL Herbicide.</p> <p>Cereal crops: For tank mixtures with TITAN Metsulfuron 600 WG Herbicide: Harvesting for grain: NOT REQUIRED WHEN USED AS DIRECTED. Grazing for meat production: DO NOT GRAZE FOR 21 DAYS AFTER APPLICATION OR IF GRAZING PRIOR TO 21 DAYS AFTER APPLICATION. DO NOT send animals for slaughter that have grazed treated pasture WITHIN 21 DAYS OF APPLICATION unless first placing the animals on clean feed for 3 days before leaving the farm. Grazing for milk production: NOT REQUIRED WHEN USED AS DIRECTED. Cutting for animal feed: DO NOT CUT FOR 21 DAYS AFTER APPLICATION.</p> <p>For tank-mixtures with TITAN Metsulfuron 600 Herbicide and TITAN Picloram + MCPA 242 Herbicide: Grazing for meat production: DO NOT GRAZE FOR 21 DAYS AFTER APPLICATION. Grazing for milk production: DO NOT GRAZE FOR 7 DAYS AFTER APPLICATION. Cutting for animal feed: DO NOT CUT FOR 21 DAYS AFTER APPLICATION.</p> <p>IMPORTANT: Read the MANAGEMENT OF RESIDUES IN COMPOST, MULCHES AND ANIMAL WASTE in the PROTECTION OF CROPS, NATIVES AND OTHER NON-TARGET PLANTS section of this label.</p> <p>For tank mixtures other than those listed below, observe the WHP and/or export intervals for the partner product if longer than those for TITAN Aminopyralid 240 SL Herbicide.</p> <p>When used as directed and the below withholding period is 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>
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General Instructions:	This section contains file attachment.
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Resistance Warning:	<p>RESISTANT WEEDS WARNING</p> <p>GROUP 4 HERBICIDE</p> <p>TITAN Aminopyralid 240 SL 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 TITAN AG Pty Ltd representative for details.</p>
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Precautions:	<p>PRECAUTIONS</p> <p>Re-entry: wait until the spray has dried, if prior re-entry is required wear the personal protective equipment as directed in the SAFETY DIRECTIONS section of this label.</p>
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Protections:	<p>PROTECTION OF LIVESTOCK</p> <p>DO NOT graze or cut treated crops or plants for stock food except as specified under WITHHOLDING PERIODS. It is recommended, however, not to graze treated areas for 2 to 3 days to ensure product efficacy. Poisonous plants may become more palatable after spraying and stock should be kept away from these plants until they have died down.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <p>DO NOT contaminate wetlands or watercourses with this product or used container.</p> <p>PROTECTION OF CROPS, NATIVES AND OTHER NON-TARGET PLANTS</p> <p>DO NOT use on land to be cultivated for growing susceptible crops for up to 20 months of applying TITAN Aminopyralid 240 SL 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 Aminopyralid 240 SL 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.</p> <p>DO NOT allow spray drift onto sensitive native vegetation or susceptible crops, such as canola, cotton, tomatoes, vines, fruit, potatoes, vegetables, ornamentals, tobacco, lupins and other legumes, safflower, sugar beet, hops, flowers or shade trees. Field peas, faba beans, lentils and vetches are particularly susceptible.</p> <p>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.</p> <p>MANAGEMENT OF RESIDUES IN COMPOST, MULCHES AND ANIMAL WASTE</p> <p>For tank-mix with TITAN Metsulfuron 600 WG Herbicide only:</p> <p>DO NOT send treated crops off-farm as hay, silage or for use as animal bedding. Aminopyralid residues from treated plants may pass into animal manure, composts, mushroom substrates, mulches and cause injury to sensitive broadleaf plants.</p> <p>DO NOT spread manure from animals that have grazed or consumed forage or hay from treated areas on land used for growing susceptible broadleaf crops.</p> <p>Ensure that harvesters effectively spread crop straw and do not leave a heavy 'header trail' after harvest. Burn (if legal in the area or bale and remove, slash or incorporate stubble as soon as practical after harvest and for as long as possible before planting next year to allow microbial breakdown of any residues in straw.</p> <p>Heavy stubble loads may carry more residues into the following season. Where heavy stubble burdens and/or non-wetting soils exist and less than the recommended amount of rain has fallen from application to planting the susceptible crop (see above, only plant a winter or summer cereal.</p>
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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. This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. DO NOT dispose of undiluted chemical 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 program site. The cap should not be replaced, but may be taken separately. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.</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.</p> <p>Small spills/leaks: Wear protective equipment (see SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. Sweep up material for disposal when absorption is completed 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.</p>
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Safety Directions:	<p>SAFETY DIRECTIONS</p> <p>May irritate skin, will damage eyes. Avoid contact with skin and eyes. When opening the container and preparing the spray, wear cotton overalls buttoned to the neck and wrists (or equivalent clothing) and face shield or goggles. Wash hands after use. After each day's use, wash face shield or goggles and contaminated clothing.</p> <p>WHEN USING TOGETHER WITH OTHER PRODUCTS, CONSULT THEIR LABEL SAFETY DIRECTIONS.</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 131126; New Zealand 0800 764 766. 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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Restraints:

DO NOT apply to crops or weeds which are not actively growing or to plants which may be stressed 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.

When treatment is followed by a severe stress such as drought, prolonged cold, waterlogging or frost condition, growth retardation may occur. Crops normally recover without loss of yield. Disease, nematode or insect damage after application may also result in crop injury.

DO NOT spray if rain is likely to occur within one hour or if foliage is wet from rain or dew or if heavy rain is likely to occur within 48 hours.

AVOID double overlaps to reduce risk of injury to rotational crops the following season.

DO NOT sow susceptible crops into paddocks treated the previous season until after the required plantback period has elapsed – see GENERAL INSTRUCTIONS.

In areas prone to flooding treatment should commence after any annual flooding, as such areas flooded within 9 months following application may have reduced results.

For tank mixtures with TITAN Metsulfuron 600 WG Herbicide only:

DO NOT use on furrow or flood irrigated crops.

DO NOT store tankmix for prolonged periods, apply immediately after preparing the tankmix.

DO NOT apply before the 3 leaf stage of the crop when used for post emergent weed control.

DO NOT apply more than one application of TITAN Aminopyralid 240 SL Herbicide + TITAN Metsulfuron 600 WG Herbicide either alone or in a tankmix with other product/s per season.

DO NOT use in winter cereal crops undersown with legume pasture species eg medics, clovers.

DO NOT apply other sulfonylurea herbicides in a tankmix with TITAN Aminopyralid 240 SL Herbicide + TITAN Metsulfuron 600 WG Herbicide as a preplant application.

Use of this product on land that has a soil pH of 5.5 or less may result in some crop retardation, particularly if the crop is stressed – see previous restraint for more details on crop/weed stress.

DO NOT apply to Wheat varieties King, Jacup, Miling, Harrier.

DO NOT apply to durum Wheat varieties.

TITAN Aminopyralid 240 SL Herbicide + TITAN Metsulfuron 600 WG Herbicide has been tested over major commercially grown wheat and barley varieties, but not all of those that may be grown. Care should be taken if it is intended to apply TITAN Aminopyralid 240 SL Herbicide + TITAN Metsulfuron 600 WG Herbicide in the same season to a crop already treated with another sulfonylurea herbicide as crop damage may occur.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow bystanders to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

DIRECTIONS FOR USE

CROPS

Table 1: For use on winter cereals (Wheat, Barley,) in tank mix with TITAN Metsulfuron 600 WG Herbicide post crop and weed emergence (Northern NSW, QLD only).

Read Crop Safety Directions below.

Always add TITAN Wetter 1000 Wetting Agent at 0.1%.

CROP	CROP GROWTH STAGE	WEEDS CONTROLLED	WEED GROWTH STAGE	RATE/ha	TITAN Metsulfuron 600 WG and partner RATE/ha	CRITICAL COMMENTS
Winter cereals (Wheat, and Barley,) (Northern NSW, QLD only)	Apply from 3 leaf up to 1 st node stage of the crops (Z13 to Z31). When mixing with other products observe the crop stage for those products	Climbing Buckwheat / Black Bindweed (<i>Fallopia Convolvulus</i>)	Up to 4 leaf	22mL	7g	
	Apply from early tillering (when main shoot has 4 to 5 leaves plus 2 or more tillers have formed) to start of jointing (1 st node)			16mL	5g + 1L TITAN Picloram + MCPA 242	For best control apply at early tillering of the crop as this weed becomes increasingly difficult to control as it becomes larger.

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

GENERAL INSTRUCTIONS

MINIMUM RECROPPING PERIODS

Use of TITAN Aminopyralid 240 SL Herbicide may prevent early reestablishment of many crops including grasses after treatment. 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. Breakdown is fastest in warm and wet conditions and slower in cold and dry conditions. The following tables show plantback periods to specific crops following application of TITAN Aminopyralid 240 SL Herbicide in different areas/situations of Australia. Land previously treated with TITAN Aminopyralid 240 SL Herbicide should not be rotated to crops other than those listed in the table below. Tolerance of other crops (grown through to maturity) should be determined on a small scale before sowing into larger areas (see field bioassay in PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS section).

Note: Before using TITAN Aminopyralid 240 SL Herbicide in tankmixes with other herbicides, check the plantback information on all product labels. The most residual product, ie the product with the longest plantback period, will determine the time between spraying and planting the next crop. See also PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS.

For tankmix with TITAN Metsulfuron 600 WG Herbicide

Users should be aware that there could be varietal differences in crop sensitivity and should seek the most recent data from TITAN AG.

Soil pH	Crops	Rainfall*	Plantback period
5.6-8.5	Wheat, Barley, Canola (Imidazolinone tolerant varieties only), Triticale	50-100mm	4 months
	Canola	>300mm	9 months
		<300mm	20 months
	Faba Bean	All	20 months
8.6 and above	Tolerance of crops (grown through to maturity) should be determined on a small scale, in the previous season, before sowing to larger areas.		
*Rainfall must be sufficient and of distribution to ensure soil wetting to 100mm for longer than 1 week, for 4 month plantback time. For 9 month or longer plantback times, at least 300mm must have fallen between treatment and desired replant time, with more than 100mm of that over the warm months of summer to autumn to ensure soil wetting to depth of 100mm for longer than 2 weeks. Breakdown is fastest in warm, wet and acidic conditions and slower in cold, dry and alkaline conditions.			

For winter crops such as Chickpea, Linseed, Lucerne, Medic, Oats, Safflower and Subclover and for summer crops such as Cotton, Japanese Millet, Maize, Mung Beans, Panorama Millet, Sorghum, Soybean, Sunflower and White French Millet please consult TITAN AG for advice on plantback periods.

Southern NSW

Plantback periods (months) for crops following blanket wiper application of TITAN Aminopyralid 240 SL for rates up to 17mL/ha	
Crop	Months
Barley, Canola Wheat	9
Chickpea, Faba Bean, Field Pea, Lucerne, Lupin, Medic, Subclover	24

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) or bale and remove, slash or incorporate stubble as soon as practical after harvest and for as long as possible before planting next year to allow microbial breakdown of any residues in straw.

Heavy stubble loads may carry more residues into the following season. Where heavy stubble burdens and/or non-wetting soils exist and less than the recommended amount of rain has fallen from application to planting the susceptible crop (see above), only plant a winter or summer cereal.

Where TITAN Aminopyralid 240 SL Herbicide residue carryover 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 a cereal crop (see plantback recommendations).

Pot bioassay – where not practical to do field bioassay, a simple bioassay can be conducted 4 to 6 weeks before desired planting date by collecting at least 10 spade spits of soil to a depth of 200mm from around the paddock and thoroughly mixing the soil together. Place some of this soil in a shallow container to a depth of 3-5cm 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 Aminopyralid 240 SL 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. Lentils are highly sensitive to TITAN Aminopyralid 240 SL Herbicide and therefore are a good test species for a bioassay.

COMPATIBILITY

TITAN Aminopyralid 240 SL Herbicide is compatible with a range of TITAN AG herbicides and other crop protection products. Always follow the correct mixing order. Refer to the TITAN Aminopyralid 240 SL Herbicide physical compatibility guide and correct mixing order guide at titanag.com.au before use.

MIXING

TITAN Aminopyralid 240 SL Herbicide can be mixed with water only.

Mix only sufficient chemical for each day's use and avoid storing mix.

Half fill the spray tank with water and add the required quantity of TITAN Aminopyralid 240 SL Herbicide and complete filling. Agitate continuously to ensure thorough mixing before and during application.

Tank mixtures: Wettable powder or dry flowable formulations (eg water dispersible granules) should be added to the spray tank first, followed by suspension concentrates (flowables), water soluble salts (eg TITAN Aminopyralid 240 SL Herbicide) and then emulsifiable concentrate formulations. Add spraying oils and surfactants (wetters) last, if required.

USE OF SURFACTANT/WETTING AGENT

Use TITAN Wetter 1000 Wetting Agent (when mixed with TITAN Metsulfuron 600 WG Herbicide).

APPLICATION

1. Cropping Situations

Ground Boom Spraying: Apply in 50-100L water/ha using a coarse spray through accurately calibrated equipment. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping as injury to the crop may occur.

Aerial Application: Apply in not less than 30L water/ha using a coarse spray through accurately calibrated equipment.

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 Aminopyralid 240 SL 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):

For tank-mixtures with TITAN Metsulfuron 600 WG Herbicide: After rinsing the tank as above, fill the tank with clean water and add 300mL household chlorine bleach (containing 4% chlorine) per 100L of water. Household bleach should be less than 12 months old and stored away from direct sunlight. Flush through boom and hoses then allow to stand for 15 minutes with agitation engaged, then drain. Drain tank, then flush tank, boom and hoses with clean water for a minimum of 10 minutes.

Nozzles, screens, filters, relief valves, dump lines, caps and taps at the end of spray lines, tank lids, flow meters, lines to pressure gauges, external tank indicators, induction hoppers, etc should be removed/pulled apart and cleaned separately. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush through hoses and boom. **Caution:** DO NOT use chlorine bleach with ammonia.

DO NOT clean equipment in an enclosed area.