# CAUTION

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

# TERBUTRYN 275 + MCPA 160 HERBICIDE

ACTIVE CONSTITUENTS: 275g/L TERBUTRYN 160g/L MCPA present as the POTASSIUM SALT

For the control of seedling broadleaf weeds in wheat, barley, some varieties of oats, pasture and sugarcane as specified in the Directions for Use table. APVMA Approval No.: 89049/124604 Pack Size: 1L; 5L; 10L; 20L; 110L; 200L; 1000L



TITAN

TITAN AG Pty Ltd | ABN 57 122 081 574 15/16 Princes Street, Newport NSW 2106 Tel (02) 9999 6655 | Fax (02) 9999 0483 titanag.com.au IN A TRANSPORT EMERGENCY
DIAL OOO
POLICE OR FIRE BRIGADE

GROUP HERBICIDE

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 to crops undersown with legumes. DO NOT spray if weeds are wilted by dry or cold weather. DO NOT spray if rain is expected within 6 hours. DO NOT spray cereals or pastures on days when the temperature is greater than 22°C. DO NOT add a wetting agent or a spraying oil for use in cereals or pasture.

CROP	WEEDS CONTROLLED	ſ	STATE	RATE/HA	CRITICAL COMMENTS
Wheat, barley and certain oat varieties <sup>(2)</sup>	Australian Crassula Cape Weed Charlock Fumitory-Red Fumitory-White Indian Hedge Mustard Melilotus/Hexam Scent Paterson's Curse Rough Poppy Rounded Chamomile Sheepweed/Corn Gromwell Turnip Weed Wards Weed Wild Turnip Yellow Burr Weed Fat Hen	Crassula sieberana Arctotheca calendula Sinapis arvensis Fumaria densiflora Fumaria parviflora Sisymbrium orientale Melilotus indica Echium plantagineum Papaver hybridum Matricaria matricarioides Buglossoides arvense Rapistrum rugosum Carrichtera annua Brassica toumefortii Amsinckia spp. Chenopodium album	NSW, VIC, SA, WA only SA, WA	1L	Spray actively growing weeds at the 2 to 6 leaf stage when cereals have 3 to 5 leaves on the main stem, i.e. Zadok scale code Z13-15. Ensure Yellow Burr Weed plants are at the 2 to 6 leaf stage. If plants are older than this use the higher rate. D0 NOT spray this weed after the 12 leaf stage.
	Scented Woolly Sage Ball Mustard <sup>(1)</sup> Deadnettle Mallee Catchfly Pimpernel Ivyleaf Speedwell Three-cornered Jack / Spiny Emex/ Doublegee Toadrush Wireweed Saffron Thistle	Salvia lanigera Neslia paniculata Lamium amplexicaule Silene apetala Anagallis arvensis Veronica hederifolia Emex australis Juncus bufonius Polygonum aviculare Carthamus lanatus	only NSW, VIC, SA, WA only SA, WA	1.5L	Spray actively growing weeds at the 2 to 6 leaf stage when cereals have 3 to 5 leaves on the main stem, i.e. Zadok scale code Z13-15. For Three-cornered Jack apply at the 1 to 4 true leaf stage. Control of lvyleaf Speedwell may at times be variable.
	Stemless Thistle	Onopordum acaulon	only		
Pastures Use on Sub. clover (min. 1 trifoliate leaves) based pasture with either/or Ryegrass, Phalaris, Cocksfoot (grasses min. 2 leaves)	Paterson's Curse (cotyledon to 2 leaf)	Echium plantagineum	NSW, VIC, SA, WA only	300mL to 500mL	Apply soon after the break to the season when the weeds are up to the 2 leaf stage. Apply by boom spray or aircraft. Use the highest rate when the majority of plants are at the 2 leaf stage. Some reduction in clover growth may occur for a period after application. Plants usually recover and grow normally. Pasture should be growing well with adequate fertiliser and mite/insect control to help reduce the establishment of later germinating seedlings. Larger weeds present at spraying may not be controlled. DO NOT use on medics. DO NOT apply in less than 50L/ha water. DC NOT use on seed crops. DO NOT spray after mid-August as damage may occur.
Pastures Use on mixtures of either/or Sub. clover (min. 3 trifoliate leaves), Balansa clover (established plants), White clover (min. 5 trifoliate leaves) with either/or Ryegrass, Phalaris, Cocksfoot (grasses min. 3 leaves)	Capeweed (seedlings up to 20cm diam.) Long Storksbill (seedlings up to 8cm diam.) Paterson's Curse (seedlings up to 20cm diam.) Toadrush (1 - 5 leaves) Crassula (1 - 5 cm diam.)	Arctotheca calendula Erodium botrys Echium plantagineum Juncus bufonius Crassula spp.	NSW, VIC, SA, WA only	1L to 1.5L	Apply by boom spray or aircraft. Use the highest rate when weeds are greater than 7cm in diameter. Where a selective grass herbicide is to be used, apply TITAN Terbutryn 275 + MCPA 160 Herbicide prior to the application of the selective grass herbicide. Some reduction in clover growth may occur for a period after application. Plants usually recover and grow normally. D0 NOT use on medics. D0 NOT apply in less than 50L/ha water. D0 NOT use on seed crops. D0 NOT spray after mid-August as damage may occur.



CROP	WEEDS CONTROLLED		STATE	RATE/HA	CRITICAL COMMENTS
Sugarcane (plant and ratoon)	Bellvine Morning Glory Red Convolvulus Pink Convolvulus Star of Bethlehem Blackberry Nightshade Red Pigweed Giant (Black) Pigweed Pink Burr Square Weed Thornapple Sowthistle Native Jute Calopo Rattlepod Annual Ground Cherry <u>Suppression only</u> Bluetop <sup>(4)</sup> Common Sensitive Plant	Ipomoea plebeia Ipomoea purpurea Ipomoea hederifolia Ipomoea triloba Ipomoea quamoclit Solanum nigrum Portulaca oleracea Trianthema portulacastrum Urena lobata Spermacoce latifolia Datura stramonium Sonchus oleraceus Corchorus trilocularis Calopogonium mucunoides Crotalaria spp. Physalis ixiocarpa Ageratum houstonianum Mimosa pudica	QLD, NSW, WA, NT only	2L to 4L <sup>(3)</sup>	Apply post-emergent to broadleaf weeds up to 8 leaf or 30cm diameter stage, vines to 1m. Application should be made when weeds are growing actively and not suffering from moisture stress or waterlogging. Under cool conditions (<22°C) control may be slower and less effective. Can be applied over the top of cane. Some initial leaf yellowing and scorch may result but cane normally recovers well within 4 weeks. Caution should be exercised on new varieties of cane which may not have been tested. Use the lower rates on small weeds (less than 4 leaf) and the higher rates for larger weeds. Apply in a spray volume of 200-400L/ha and ensure thorough coverage. Use the higher spray volumes where weed density is high or weeds are more advanced. (4) Bluetop will only be suppressed. Use a minimum of 3L/ha, on weeds less than 10cm. Common sensitive plant – use a minimum
	Green Summer Grass Crowsfoot Grass Barnyard Grass Guinea Grass Summer Grass Bluetop Centro Wild Rose Bellvine Morning Glory Red Convolvulus Pink Convolvulus Star of Bethlehem Giant Sensitive Plant Common Sensitive Plant Stinking Passion Vine Square Weed Cinderella Weed Giant (Black) Pigweed Pink Burr Thornapple Sowthistle Native Jute Calopo Rattlepod Annual Ground Cherry Blackberry Nightshade	Brachiaria miliiformis Eleusine indica Echinochloa colona Panicum maximum var Hamil Digitaria ciliaris Ageratum houstonianum Centrosema pubescens Cleome aculeate Ipomoea plebeia Ipomoea plebeia Ipomoea hederifolia Ipomoea hederifolia Ipomoea triloba Ipomoea quamoclit Mimosa pudica Passiflora foetida Spermacoce latifolia Synedrella nodiflora Trianthema portulacastrum Urena lobata Datura stramonium Sonchus oleraceus Corchorus trilocularis Calopogonium mucunoides Crotalaria spp. Physalis ixiocarpa Solanum nigrum	QLD, NSW, WA, NT only	3L (+ 3L ametryn 500g/L) to 4L (+ 3.7L ametryn 500 g/L) <sup>(3)</sup>	of 3L/ha. Use in a tank mix with ametryn (500g/L). Apply between the early (1-4 leaf) and late (20cm for grasses [Guinea grass and summer grass max. 15cm] and 30cm for broadleaf weeds) post-emergent stages of weeds. Use the lower rates on small weeds (less than 4 leaf) and for short residual control and the higher rates for large weeds and medium residual control. Where residual control is required the tank mix should be applied to moist soil and when rain or irrigation is expected within 10 days. Application should be made when weeds are growing actively and not suffering from moisture stress or waterlogging. Under cool conditions (<22°C) control may be slower and less effective. Apply in a spray volume of 200-400L/ha and ensure thorough coverage. Use the higher volumes where weed density is high or weeds are more advanced. D0 NOT apply this mixture by air. D0 NOT apply over the top of cane. Use a directed spray to minimise contact with sugarcane foliage and shading of weeds. <b>Caution:</b> Contact with the foliage of ametryn sensitive cane varieties such as Q119, Q122 and H56-752 should be avoided as they are susceptible to phytotoxicity from the tank mix. Caution should be exercised on new varieties of cane, which may not have been tested.

(1) Suppression only at 1.5L/ha.

(2) Tolerant oat varieties are listed under the Crop Safety sub heading in the General Instructions section.

(3) Add BS1000 120mL/100L or Agral 200mL/100L (sugarcane only).

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

WITHHOLDING PERIODS:

DO NOT GRAZE BARLEY, WHEAT, OATS OR PASTURE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION. Do not apply the tank mix of titan terbutryn 275 + mcpa 160 herbicide and Ametryn (500g/L) later than 9 months before harvest.



## **GENERAL INSTRUCTIONS**

#### MIXING

TITAN Terbutryn 275 + MCPA 160 Herbicide mixes readily with water. Half fill the spray tank with water. Shake the container several times before use and add the recommended quantity to the tank. Keep the spray mixture well agitated during mixing and spraying using either mechanical or venturi type agitation that has sufficient water movement for the solution to remain in suspension. Reseal part-used containers immediately. Wash sprayer thoroughly with clean water after use.

## APPLICATION

**Boom Sprayer:** Calibrate the sprayer before use to ensure the correct application rate is applied per hectare. Check boom height for even application.

**Cereal and pastures:** Apply 50 to 100L of water/ha using no smaller than 80 mesh pump and jet filters. Use the higher volume if the weed infestation is heavy or the crop cover is dense.

**Sugarcane:** Apply 200 to 400L of water/ha using no smaller than 80 mesh pump and jet filters. Use the higher volume if the weed density is high or on more advanced weeds. Thorough coverage is necessary. Always add the required wetter.

**Aircraft:** Apply 20 to 30L of water/ha. The higher volume is preferred due to more reliable results. Weed control following aerial application may not be as good as from ground application.

#### COMPATIBILITY

This product can be tank mixed with metsulfuron methyl herbicide for the control of specific weeds such as Capeweed, Sheepweed and Toadrush. DO NOT tank mix with diclofop methyl or tralkoxydim as significant crop injury and reduced weed control will occur. In pastures this product can be mixed with MCPA amine and the insecticides dimethoate, phosmet, Karate, alpha-cypermethrin and omethoate (ensure good agitation is maintained with this product and avoid use of cold water). In sugarcane this product can be tank mixed with Agral, BS1000 wetter, 2,4-D amine and ametryn (500g/L). When tank mixing read both labels and adhere to the crop recommendations and directions that are most restrictive. The compatibilities given are based on experience and are considered correct. However, as changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays, TITAN AG Pty Ltd accepts no responsibility for the behaviour of such mixtures.

#### TIMING

Weeds should be sprayed while actively growing and at the 2 to 6 true leaf stage when they are most susceptible. As a general guide TITAN Terbutryn 275 + MCPA 160 Herbicide should be applied approximately 5 to 8 weeks after planting. Extremes of cold or drought are unfavourable. The most favourable conditions are when soil is moist, weather fine and rain unlikely within 6 hours following application. In pasture, weeds should be up to 20 cm diameter but refer to the directions for use table for specific details. In sugarcane, apply TITAN Terbutryn 275 + MCPA 160 Herbicide alone to broadleaf weeds up to the 8 leaf or 30cm diameter stage, vines to 1m length.

#### **CROP SAFETY**

Research has shown that although some early growth check and leaf margin scorch can occur in oats, if grain yield is measured, the following varieties are tolerant or moderately tolerant to TITAN Terbutryn 275 + MCPA 160 Herbicide.

**Tolerant:** (apply up to 1.5L/ha) Bandicoot, Coolabah, Mortlock, Potaroo, Swan, Wallaroo, West.

Moderately Tolerant: (DO NOT exceed 1L/ha) Dalyup, Windjardie.

DO NOT spray other oat varieties unless you seek advice before spraying.

In pastures, sub. clover growth may be reduced for a period after application but plants usually recover and spring growth is not normally affected.

Sugarcane varieties such as Q122 may show yellowing and some leaf scorch immediately after spraying but plants normally recover within 4 weeks.

# **RESISTANT WEEDS WARNING**

TITAN Terbutryn 275 + MCPA 160 Herbicide is a member of both the triazines and phenoxys



groups of herbicides. TITAN Terbutryn 275 + MCPA 160 Herbicide has the inhibitor of photosynthesis at photosystem II and disrupt or of plant cell growth modes of action. For weed resistance management TITAN Terbutryn 275 + MCPA 160 Herbicide is a group C and I herbicide. Some naturally occurring weed biotypes resistant to TITAN Terbutryn 275 + MCPA 160 Herbicide and other group C or I 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 TITAN Terbutryn 275 + MCPA 160 Herbicide or other group C or I 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 TITAN Terbutryn 275 + MCPA 160 Herbicide to control resistant weeds.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND THE ENVIRONMENT** Dangerous to fish. D0 NOT contaminate streams, rivers, or watercourses with the chemical or used containers.

#### PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. Avoid spray drift onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated locked area away from children, animals, food, feedstuffs, seed and fertilisers. 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 for appropriate disposal 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.

For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

#### SAFETY DIRECTIONS

Harmful if swallowed. Attacks eyes. Will irritate the skin. Avoid contact with skin. Repeated exposure may cause allergic disorders. When preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and goggles. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles and contaminated clothing.

### FIRST AID

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

#### SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS). A safety data sheet for TITAN Terbutryn 275 + MCPA 160 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.

Additional statements required by Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia: Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Toxic to aquatic life. Very toxic to aquatic life with long lasting effects. <u>Precautionary Statements</u>: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves / eye protection / face protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Rinse mouth. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Collect spillage. Dispose of contents/container in accordance with local/regional/national regulations.

