# **POISON**

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

# Bromoxynil MA Selective Herbicide

# **ACTIVE CONSTITUENTS:**

200g/L BROMOXYNIL present as the N-OCTANOYL ESTER 200g/L MCPA present as the ETHYL HEXYL ESTER SOLVENT: 343g/L LIQUID HYDROCARBON



For the control of weeds in wheat, oats, barley, cereal rye, triticale, linseed, grass pastures and turf as per the directions for use table.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 62641/1207

Pack Sizes: 5L, 20L, 110L, 120L, 220L, 1000L



# **TITAN AG Pty Ltd**

3/14 Narabang Way, Belrose NSW 2085 Telephone 02 9986 2943 Fax 02 9986 2945 www.titanag.com.au IN A TRANSPORT EMERGENCY

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 NO DO NOT spray if weeds are wilted by dry or cold weather or if crops are at a susceptible stage, or if rain is likely within 4 hours. DO NOT apply if frosts are imminent.

DO NOT apply to diseased or frost affected crops or turf.

SITUATION & CROP	WEEDS CONTROLLED	<u> </u>	STATE	RATE/HA	CRITICAL COMMENTS
Wheat, Barley, Cereal Rye, Oats and Triticale; Linseed; Grass Pastures	Amsinckia (Amsinckia spp.), Capeweed (Arctotheca calendula), Chamomile (Matricaria matricarioldes), Charlock (Sinapis arvensis), Corn Gromwell (Ironweed, Sheepweed) (Buglossoides arvensis), Fat Hen (Chenopodium album), Field Madder (Sherardia arvensis), Hexham Scent (King Island Melilot) (Melilotus indica), Horned Poppy (Glaucium flavum), Indian Hedge Mustard (Sisymbrium orientale), Lesser Swinecress (Coronopus didymus), Mexican Poppy (Argemone ochroleuca), Mintweed (Salvia reflexa), Paterson's Curse (Salvation Jane) (Echium plantagineum), Rough Poppy (Papaver hybridum), Saffron Thistle (Carthamus lanatus), Shepherd's Purse (Capsella bursa-pastoris), Slender Thistles (Carduus tenuiflorus, C. pycnocephalus), Tree Hogweed (Polygonum patulum), Turnip Weed (Giant Mustard) (Rapistrum rugosum), Wild Radish (Raphanus raphanistrum), Wild Turnip (Brassica tournefortin) Black Bindweed* (Climbing Buckwheat)	Plants up to the 6 leaf stage but not more than 50mm in diameter  Plants up to the 8 leaf stage but not more than 75mm in diameter  Plants up to the 10 the	QLD, NSW, ACT, VIC, TAS, SA, NT only	750mL 1.4L/ha 2.0L/ha 1.4L/ha	CROP STAGE:  Wheat, Barley, Cereal Rye, Oats and Triticale: 3 leaf to fully tillered stage (Zadok Scale Z13-30) for rates of 750mL to 1.4L/ha; 5 leaf to fully tillered stage (Z15-30) for rate of 2.0L/ha (NSW, ACT, VIC, SA, WA, TAS only); or early tillering to fully tillered stage (Z21-30) (QLD only).  Linseed: 50 to 150mm high.  DO NOT apply to linseed by aircraft.  * If spraying Black Bindweed when wheat, barley, cereal rye, oats, triticale or linseed is more than 300mm high, increased spray volume to 200L/ha.  For optimal control, apply only when the weeds are actively growing.  In the early stages following spraying, temporary wilting of crop and pasture may occur.  Crop scorch may occur, particularly on oats if treatment is delayed to later stages of growth. Refer to the General Instructions.  Avoid application when maximum daily temperatures above 20°C occur, or are likely to occur for a few days after application.  DO NOT apply to crops or pastures undersown with lucerne, clover or medics unless some damage is acceptable.
	(Fallopia convolvulus), Common Peppercress (Lepidium africanum), Mustards (Sisymbrium spp.), Purple Calandrinia (Calandrinia menziesii)	4 leaf stage but not more than 35mm in diameter Plants up to the 6 leaf stage but not more than 50mm in diameter Plants up to the 8 leaf stage but not more than 75mm in diameter		1.4L/ha 2.0L/ha	
		50mm in diameter Plants up to the 4 leaf stage but not more than 60mm in diameter Plants up to the 5 leaf stage but	ACT, VIC, TAS, SA only WA only QLD, NSW, ACT, VIC, TAS, SA, NT only	1.4L/ha 750mL/ha 2.0L/ha 1.4L/ha	CROP STAGE: Wheat, Barley, Cereal Rye, Oats and Triticale: 3 leaf to fully tillered stage (Zadok Scale Z13-30) for rates of 750mL to 1.4L/ha; 5 leaf to fully tillered stage (Z15-30) for rate of 2.0L/ha (NSW, ACT, VIC, SA, WA, TAS only); or early tillering to fully tillered stage (Z21-30) (QLD only).  Linseed: 50 to 150mm high.  DO NOT apply to linseed by aircraft. For optimal control, apply only when the weeds are actively growing.  In the early stages following spraying, temporary wilting of crop and pasture may occur.  Crop scorch may occur, particularly on oats if treatment is delayed to later stages of growth. Refer to the General Instructions.  Avoid application when maximum daily temperatures above 20°C occur, or are likely to occur for a few days after application.  DO NOT apply to crops or pastures undersown with lucerne, clover or medics unless some damage is acceptable.  ** Where Wireweed (Hogweed) occurs in red soils of low fertility, it has been found to be less susceptible.  In these circumstances use 2.0L/ha.



SITUATION & CROP		WEED STAGE	STATE	RATE/HA	CRITICAL COMMENTS
Wheat, Barley, Cereal Rye, Oats and Triticale; Linseed; Grass Pastures  - continued	Wireweed (Hogweed)** (Polygonum aviculare)	Plants up to the 4 leaf stage but not more than 35mm in diameter	QLD, NSW, ACT, VIC, TAS, SA, NT only	750mL/ha 1.4L/ha	CROP STAGE: Wheat, Barley, Cereal Rye, Oats and Triticale: 3 leaf to fully tillered stage (Zadok Scale Z13-30) for rates of 750mL to 1.4L/ha; 5 leaf to fully tillered stage (Z15-30) for rate of 2.0L/ha (NSW, ACT, VIC, SA, WA, TAS only); or early tillering to fully tillered stage (Z21-30) (QLD only). Linseed: 50 to 150mm high. DO NOT apply to linseed by aircraft. For optimal control, apply only when the weeds are actively growing.
		Plants up to the 6 leaf stage but not more than 50mm in diameter		2.0L/ha 1.4L/ha	
	Mountain Sorrel ( <i>Oxalis acetosella</i> ), Three-horned Bedstraw	Plants up to the 6 leaf stage Plants up to the		750mL/ha 1.4L/ha	In the early stages following spraying, temporary wilting of crop and pasture may occur. Crop scorch may occur, particularly on oats if treatment is
	Cleavers (Galium aparine)	8 leaf stage 2-4 stem stage and 1-3 whorls of leaves per stem		750mL/ha	delayed to later stages of growth. Refer to the General Instructions.  Avoid application when maximum daily temperatures above 20°C occur, or are likely to occur for a few days after application.  DO NOT apply to crops or pastures undersown with lucerne, clover or medics unless some damage is acceptable.  ** Where Wireweed (Hogweed) occurs in red soils of low fertility, it has been found to be less susceptible. In these circumstances use 2.0L/ha.
Wheat, Barley, Cereal Rye, Oats, Triticale	Common Sowthistle (Sonchus oleraceus)				Apply under good growing conditions. Avoid spraying when soil is dry. DO NOT spray under frosty conditions. In early stages following spraying, temporary wilting of crop may occur. Avoid application when maximum daily temperatures above 20°C or are likely to occur for a few days after application.  DO NOT apply to crops undersown with lucerne, clover or medics unless some damage is acceptable.
		Up to 4 leaves	QLD and Northern NSW only	1.4L/ha	CROP STAGES: Wheat, Barley, Oats, Triticale: 3 leaf to full tillering (Z13-Z30). Use as early as possible to avoid shading of weeds by the crop. Strictly for use on small weeds early in crop before shading out. If Group B resistance is suspected, or weeds have grown through a previous application of chlorsulfuron apply 2.1L/ha. Use a minimum spray volume of 70L/ha.
		4 to 8 leaves		2.1L	CROP STAGES: Wheat, Barley, Oats and Triticale: 3 leaf to full tillering (Z13-Z30). Use as early as possible to avoid shading of weeds by the crop.
established Couch (incl. Queensland Blue), Kikuyu, Paspaium, Buffalo, Fescue, Bent & Rye	Bindy-eye, Jo-Jo (Onehunga), Cudweed, Dandelion, Catsear, Plantains, Thistles, Oxalis, Capeweed, Creeping Buttercup, Fleabane, Clover (not TAS.)	_	ALL STATES	300mL/ 100L water 0R 60mL/ 100m <sup>2</sup>	Apply evenly over the area to be treated.  DO NOT mow turf for 2 days after treatment.

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

WITHHOLDING PERIOD: DO NOT HARVEST, GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.



### **GENERAL INSTRUCTIONS**

Before opening, carefully read Directions for Use, Precautionary and Protection Statements, Storage and Disposal, Safety Directions and First Aid Instructions.

### MIXING

To ensure even mixing, half fill spray tank with clean water and add the required amount of this product. Agitate thoroughly, then add the remainder of water. Agitate again before spraying commences.

### **APPLICATION**

DO NOT use rain-drop or air-induction nozzles as coverage of weeds may not be adequate.

**Boom Sprayer:** Calibrate the machine before use to ensure that the correct application rate is obtained. Check height of boom above the crop to ensure that the spray is evenly distributed.

**Cereals:** Apply 50 to 200 litres of water per hectare. Use higher water volume (min. 100L/ha) where the weed infestation is heavy, the crop cover is dense or when tank-mixing with metsulfuron-methyl. Complete coverage of weeds is essential

Linseed: Apply a minimum of 220 Litres of water per hectare.

Turf: Apply a minimum of 500 Litres of water per hectare.

**Aerial Application:** Apply a minimum of 22 Litres of water per hectare or 30 litres of water per hectare if tank-mixing with metsulfuron-methyl. Markers should always move upwind before aircraft passes overhead. Application by micronaire equipment may give variable results.

### **EQUIPMENT MAINTENANCE**

After use wash application equipment thoroughly with Spraymate Tank & Equipment Cleaner and rinse several times.

### **COMPATIBILITY**

This product is physically compatible in the spray tank with one of the following herbicides or insecticides in wheat and barley only.

Diclofop-methyl, metsulfuron-methyl, dicamba 500, MCPA, dimethoate, omethoate, endosulfan or chlorpyrifos. When mixed with metsulfuron-methyl or dicamba 500, do not apply to cereals undersown with lucerne. When mixed with diclofop-methyl, do not exceed 1.4 litres of this product per hectare. Observe all instructions on the mixture partner label. As formulations of other manufactures' products are beyond the control of TITAN AG Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

### **RESISTANT WEEDS WARNING**

TITAN Bromoxynil MA Selective Herbicide is a member of both the nitriles and the phenoxys



groups of herbicides. TITAN Bromoxynil MA Selective Herbicide has both the inhibitors of photosynthesis at photosystem II and disruptors of plant cell growth mode of action. For weed resistance management TITAN Bromoxynil MA Selective Herbicide is a Group C and Group I Herbicide.

Some naturally-occurring weed biotypes resistant to TITAN Bromoxynil MA Selective Herbicide and other Group C and Group 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 this product or other Group C and Group 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 Bromoxynil MA Selective Herbicide to control resistant weeds.

### 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 and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, fruit trees and ornamentals. DO NOT apply by misting machines.

**Note:** Maximum daily temperatures at or above 20°C at application, or on days following treatment, may result in seedling mortality and established plants may be damaged.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

### PROTECTION OF LIVESTOCK

### **Grazing Precaution**

Sprayed weeds may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning. Care should be taken especially where Capeweed, Paterson's Curse and variegated thistles predominate in the pasture. Avoid grazing with young or breeding stock.

DO NOT graze horses or pigs on Paterson's curse. If in doubt, contact your nearest Department of Agriculture.

### STORAGE AND DISPOSAL (5L, 20L only)

Store in closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure 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 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.

Envirodrum 110L Mini Bulk Returnable Container: Store the original sealed Envirodrum in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any other foreign matter. After each use of the product, please ensure that the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the empty Envirodrum to the point of purchase. The Envirodrum remains the property of TITAN AG Pty Ltd.

**Refillable containers 120L, 220L:** Store in the original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. The drums remain the property of TITAN AG Pty Ltd.

**Refillable containers (1000L only):** Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

### **SAFETY DIRECTIONS**

Product is poisonous if inhaled or swallowed. Attacks the eyes and will irritate the skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing the spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves and face shield or 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, face shield or goggles and contaminated clothing.

### FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone Australia 13 11 26.

### **MATERIAL SAFETY DATA SHEET**

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Bromoxynil MA is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9986 2943 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.

