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

# Bronco® MA-X

## Herbicide

**ACTIVE CONSTITUENTS:** 

280 g/L BROMOXYNIL

present as the N-OCTANOYL ESTER

280 g/L MCPA

present as the ISO-OCTYL ESTER

**GROUP HERBICIDE** 

For control of broadleaf weeds in cereals, linseed, grass pastures and turf as specified in the Directions for Use table





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CONTENTS: 5 L, 20 L, 110 L, 200 L, 1000 L

#### **DIRECTIONS FOR USE**

**RESTRAINTS**: DO NOT apply if crops, pastures or weeds are stressed due to dry or excessively moist conditions.

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

DO NOT apply if rain is expected within three hours.

DO NOT apply using spraying equipment carried on the back of the user.

SITUATION & CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE/ha	CRITICAL COMMENTS
Wheat, Barley, Cereal Rye, Oats and Triticale; Linseed;	Amsinckia (Amsinckia spp.), Capeweed (Arctotheca Calendula), Chamomile (Matricaria matricarioides), Charlock (Sinapis arvensis), Corn Gromwell (Ironweed, Sheepweed) (Buglossoides arvensis), Fat Hen (Chenopodium album), Field Madder (Sherardia arvensis),	Plants up to the 6 leaf stage but not more than 50 mm in diameter  Plants up to the 8 leaf stage but not more than	WA only  Old, NSW, ACT, Vic, Tas, SA, NT only  WA only	1 L 1 L 1.43 L 1 L	CROP STAGE: Wheat, Barley, Cereal Rye, Oats and Triticale: 3 leaf to fully tillered stage (Zadok Scale Z13-30) for rates of 540 mL to 1 L per hectare; 5 leaf to fully tillered stage (Z15-30) for rates of 1.43 L per hectare (NSW, Vic, SA, WA, Tas only); or early tillering to fully
Grass Pastures	Hexham Scent (King Island Melilot) (Melilotus indicus), Horned Poppy (Glaucium flavum), Indian Hedge Mustard (Sisymbrium orientale), Lesser Swinecress (Coronopus didymus), Mexican Poppy (Argemone mexicana), 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 Thistle (Corduus tenuiflorus, C. pycnocephalus), Tree Hogweed (Polygonum patulum), Turnip Weed (Giant Mustard) (Rapistrum rugosum), Wild Radish (Raphanus raphanistrum), Wild Turnip (Brassica tournefortii)	75 mm in diameter			tillered stage (Z21-30) (Old only).  Linseed: 5 to 15 cm high.  DO NOT apply to linseed by aircraft.  # If spraying Black Bindweed when wheat, barley, cereal rye, oats, triticale or linseed is more than 30 cm high, increase spray volume to 200 L per hectare.  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.  DO NOT apply to crops or pastures undersown with lucerne, clover or medics unless some damage is acceptable.  Avoid application during temperatures above 20° C.



SITUATION & CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE/ha	CRITICAL COMMENTS
Wheat, Barley, Cereal Rye, Oats and Triticale;	Black Bindweed (Climbing Buckwheat)^ (Polygonum convolvulus), Common Peppercress (Lepidium hyssopifolium), Mustards (Sisymbrium spp.), Purple Calandrinia (Calandrinia menzieslii)	Plants up to the 4 leaf stage but not more than 3.5 cm in diameter	WA only	715 mL	CROP STAGE: Wheat, Barley, Cereal Rye, Oats and Triticale: 3 leaf to fully tillered stage (Zadok Scale Z13-30) for rates of 540 mL to 1 L per hectare; 5 leaf to fully tillered stage (Z15-30) for rates of 1.43 L per hectare (NSW, Vic, SA, WA, Tas only); or early tillering to fully tillered stage (Z21-30) (Qld only).  Linseed: 5 to 15 cm high. DO NOT apply to linseed by aircraft. # If spraying Black Bindweed when wheat, barley, cereal rye, oats, triticale or linseed is more than 30 cm high, increase spray volume to 200 L per hectare.  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. DO NOT apply to crops or pastures undersown with lucerne, clover or medics unless some damage is acceptable.
Linseed; Grass Pastures		Plants up to the 6 leaf stage but not more than 5 cm in diameter	All States	of 1.43 WA, Ta tillered	
- continued		Plants up to the 8 leaf stage but not more than 7.5 cm in diameter		1.43 L	
	Fumitory (Fumaria spp.), Threecornered Jack (Doublegee, Spiny Emex) (Emex Australis)	Plants up to the 3 leaf stage but not more than 5 cm in diameter	Old, NSW, Vic, Tas, SA only	1 L	
		Plants up to the 4 leaf stage but not more than 6 cm in diameter	WA only	540 mL	
		Plants up to the 5 leaf stage but not more than 7.5 cm in diameter	Old, NSW, ACT, Vic, Tas, SA, NT only	1.43 L	
		Plants up to the 6 leaf stage but not more than 8.5 m in diameter	WA only	1 L	Avoid application during temperatures above 20° C.  ^ Where Wireweed occurs in red soils of low fertility it has been found to be less susceptible. In these circumstances use 1.43 L per hectare.
	Variegated Thistle ( <i>Silybum marianum</i> ), Wireweed (Hogweed)^ ( <i>Polygonum aviculare</i> )	Plants up to the 4 leaf stage but not more than 3.5 cm in diameter		540 mL	- circumstances use 1.43 L per nectare.
			Old, NSW, ACT, Vic, Tas, SA, NT only	1L	
		Plants up to the		1.43 L	
		6 leaf stage but not more than 5 cm in diameter		1 L	
	Mountain Sorrel (Oxalis acetosella), Three-horned Bedstraw (Galium tricornutum)	Plants up to the 6 leaf stage		540 mL	
		Plants up to the 8 leaf stage		1 L	
	Cleavers ( <i>Galium aparine</i> )	2 - 4 stem stage and 1 - 3 whorls of leaves per stem		540 mL	



SITUATION & CROP	WEEDS CONTROLLED	STAGE OF WEED GROWTH	STATE	RATE/ha	CRITICAL COMMENTS
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	Northern NSW and Old only	1 L	CROP STAGE: Wheat, Barley, Oats, Triticale: - 3 leaf to full tillering (Z13-30). 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 2.1 L/ha. Use a minimum volume of 70 L/ha.
		4 - 8 leaves		1.5 L/ha	CROP STAGE: Wheat, Barley, Oats and Triticale: - 3 leaf to full tillering (Z13-30). Use as early as possible to avoid shading of weeds by the crop.
Turf: Established Couch (Including Queensland Blue), Kikuyu, Paspalum, Buffalo, Fescue, Bent and Rye Lawns	Bindy-eye (Calotis hispidula), Capeweed (Arctotheca calendula), Catsear (Hypochoeris radicata), Common Plantain (Plantago spp.), Creeping Buttercup (Ranunculus repens), Cudweed (Gnaphalium spp.), Dandelion (Taraxacum officinale), Fleabane (Conyza spp.), Jo-Jo (Onehunga) (Soliva pterosperma) Clover (Trifolium spp.), Oxalis (Oxalis spp.)	_	Old, NSW, Vic, SA, WA only	Boom Sprayer: 4.3 L in 500 L of water/ha Knapsack Sprayer: 43 mL/ 100 m² in 15 L of water Power Sprayer: 215 mL/ 500 m² in 100 L of water	A slight browning of grasses, especially Paspalum, may occur under hot conditions.  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 PERIODS
CEREALS, PASTURES: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 8 WEEKS AFTER APPLICATION.
NOT REQUIRED WHEN USED AS DIRECTED.



#### **GENERAL INSTRUCTIONS**

#### MIXING

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 again before spraying commences.

#### APPLICATION

**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. Wash the spray equipment thoroughly after use.

**Cereals:** Apply 50-200 L of water per hectare. A minimum of 160 L and preferably 200 L of water per hectare is recommended where the weed infestation is heavy or the crop cover is dense. Complete coverage of weeds is essential.

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

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

Aerial Application: Apply a minimum of 22 L of water per hectare. Markers should always move upwind before aircraft passes overhead. Application by micronaire equipment may give variable results.

#### **COMPATIBILITY**

This product is physically compatible in the spray tank with one of the following herbicides and insecticides in wheat and barley only: metsulfuron methyl, chlorpyrifos, dicamba, dimethoate, taralkoxydim, diclofop-methyl and MCPA.

When mixed with metsulfuron methyl or dicamba, DO NOT apply to cereals undersown with lucerne.

When mixed with diclofop-methyl, DO NOT exceed 1 L per hectare. As formulations of other manufacturers' products are beyond the control of Adama Australia all mixtures should be tested prior to mixing commercial quantities.

#### **RESISTANT WEEDS WARNING**

BRONCO® MA-X Herbicide contains members of the Nitrite and Phenoxy



groups of herbicides. BRONCO® MA-X has the photosystem II inhibitor and plant cell growth disrupter mode of action. For weed resistance management BRONCO® MA-X contains Group C and I herbicides. Some naturally-occurring weed biotypes resistant to one or more of the modes of action of BRONCO® MA-X and other Group C and 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 may not be controlled by BRONCO® MA-X or other Group C and I herbicides to whose mode of action they are resistant.

Since the occurrence of resistant weeds is difficult to detect prior to use, Adama Australia accepts no liability for any losses that may result from the failure of BRONCO® MA-X to control resistant weeds. However resistance should not be assumed without first viewing the method of application, the coverage and the timing of application.

#### 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 younger breeding stock. DO NOT graze horses or pigs on Paterson's Curse. If in doubt, contact your nearest Department of Agriculture.

## **PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS** DO NOT apply by misting machines.

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.

# **PROTECTION WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**Dangerous to fish. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

#### STORAGE AND DISPOSAL

**5 L, 20 L, 200 L:** Store in the closed, original container in a cool, well-ventilated area. 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 a designated collection point. 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

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.

Envirodrum Micro Matic Valve (110 L): 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 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 Envirodrum to the point of purchase. The Envirodrum remains the property of Adama Australia

1000 L: Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Storage must be secure so that contents cannot be tampered with. All locks and/or seals must be in order. If locks or seals are broken prior to initial use then the integrity of this product cannot be assured. If this occurs Adama Australia should be advised immediately. This minibulk container is reusable and remains the property of Adama Australia. DO NOT rinse empty container. Empty contents fully into application equipment. Close all valves and return to the point of supply for refill or storage. No other liquid, solid or pesticide product should be put into it. When empty return to Adama Australia for cleaning, relabelling and refilling.

#### **SAFETY DIRECTIONS**

Harmful if swallowed. Harmful if inhaled. Will irritate the eyes. May irritate the skin. DO NOT inhale spray mist. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray, except if applying by aerial spraying equipment, wear cotton overalls, buttoned to the neck and wrist (or equivalent clothing), elbow-length chemical resistant gloves, face shield or goggles and disposable mist face mask covering mouth and nose. In addition, when opening the container, preparing spray for aerial spraying equipment wear cotton overalls, over normal clothing, buttoned to the neck and wrist and half facepiece respirator with organic vapour/gas cartridge or canister. In addition, if applying by low pressure hand wand, wear cotton overalls, over normal clothing, buttoned to the neck and wrist. If product or spray in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, respirator and if rubber wash with detergent and warm water, face shield or goggles and contaminated clothing.

#### FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. If swallowed, DO NOT induce vomiting. Give a glass of water.

#### sns

Additional information is listed in the safety data sheet (SDS). A safety data sheet for BRONCO® MA-X Herbicide is available from adama.com or call Customer Service on 1800 423 262.

**CONDITIONS OF SALE:** The use of BRONCO® MA-X Herbicide being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Adama Australia accepts no responsibility for any consequence whatsoever from the use of this product.

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## NOT A DANGEROUS GOOD ACCORDING TO THE AUSTRALIAN DANGEROUS GOODS (ADG) CODE.

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