

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Cheminova

Asulam 400

Herbicide

**ACTIVE CONSTITUENT: 400 g/L ASULAM
present as the SODIUM SALT**

GROUP R HERBICIDE

For control of bracken fern in pastures, grasses in sugar cane and a range of weeds and grasses in crops and pastures as specified in the Directions for Use Table.

CONTENTS: 5-1000 L

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DIRECTIONS FOR USE:**RESTRAINTS:**

DO NOT apply by aircraft (except for sugarcane).

DO NOT apply if rain is expected within 3 hours (24 hours for bracken).

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
Apple Orchards	Docks	Boom Sprayer 4.2 L in 220-440 L water/ha Knapsack or Hand Lance 1 part to 200 parts water	NSW, ACT, Vic, Tas, SA, WA only	Apply when Docks are actively growing and have fully expanded leaves, just before flowering shoots emerge. With knapsack or hand lance, ensure uniform coverage but do not spray to run-off. Apply only to established trees. DO NOT graze the area to be sprayed for 7 days before and 21 days after application.
Hops	Broadleaf Dock, Curled Dock, Fiddle Dock	3.5-5.0 L in 220-440 L water/ha	Vic, Tas only	Apply before the hop plants have emerged. Apply the higher rate where Fiddle Dock is present or where docks are mainly old, established plants.
Lucerne – established	Docks	Boom Sprayer 2.8-4.2 L in 220-440 L water/ha	All States	Lucerne should be at least one year old. Apply when Docks are actively growing and have fully expanded leaves, just before flowering shoots emerge. Apply lower rate if Curled Dock and Broadleaf Dock are present. Apply higher rate if other docks are present. DO NOT apply in Spring if pasture is intended for seed production.
Onions	Docks	Knapsack or Hand Lance 1 part to 200 parts water	Tas only	Apply when Docks are actively growing and have fully expanded leaves, just before flowering shoots emerge. Ensure uniform spray coverage of Docks but do not spray to run-off. DO NOT apply as an overall spray as crop damage may result. Sprayed onions may show a slight yellowing but they will normally recover quickly if good growing conditions exist.
Oilseed Poppies	Broadleaf Dock, Curled Dock	2.5 L in 220-440 L water/ha		Crop stage: Spray any time after the 4 to 6 leaf stage. Weed stage: Apply when Docks are actively growing and have fully expanded leaves, just before flowering shoots emerge. The range of control is extended with a spray program in combination with ethofumesate as recommended by poppy contracting companies or the Department of Primary Industries, Tasmania.
Pastures - established & improved pastures of: Chewing's Fescue, Cocksfoot, Perennial Ryegrass, Red Clover, Tall Fescue, White Clover	Common Bracken	Boom Sprayer 12.0 L plus 838 g/L petroleum oil (2% of spray volume) in 110-330 L water/ha Motorised Mister 12.0 L plus 838 g/L petroleum oil (2% of spray volume) in 20-80 L water/ha Knapsack or Hand Lance 100 mL plus 838 g/L petroleum oil (2% of spray volume) in 9.8 L water	All States	Temporary scorch is likely to occur in perennial pastures. Apply during late April to early June after the Autumn re-growth has fully expanded and before the first frosts of the season. Where old mature fronds exist, the bracken should be slashed or burned during October or November in the year prior to spraying. Results are first seen as a lack of Spring re-growth. Ensure uniform coverage of spray over bracken. With Knapsack or hand lance, spray to give complete coverage of fronds but do not spray to run-off. DO NOT spray if rain is likely within 24 hours.

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
Pastures established & improved pastures of: Chewing's Fescue, Cocksfoot, Perennial Ryegrass, Red Clover, Tall Fescue, White Clover – <i>continued</i>	Common Bracken	Carpet Wiper 5.0 L plus 838 g/L petroleum oil (2% of spray volume)/ha	Vic only	For East Gippsland district only. To apply the recommended rate it is necessary to select an appropriate combination of flow rate, tractor speed and herbicide dilution. Refer to General Instructions for details. This rate will control bracken growing at a density of 25 fronds per square metre. The bracken should be slashed during late Spring or early Summer in the year prior to spraying to ensure regenerated fronds of similar age. The bracken should then be wiped in the following Autumn before the first frosts of the season when the regenerated fronds are fully mature. Where fronds are of variable height or occur in dense infestation of clumps, some plants may not be contacted by the herbicide solution. In these cases, repeat treatment may be necessary.
	Broadleaf Dock, Curled Dock	Boom Sprayer 2.8 L in 220-440 L water/ha	All States	Apply when Docks are actively growing and have fully expanded leaves, just before flowering shoots emerge. Slight yellowing of some pasture species may occur but they will normally recover quickly if good growing conditions exist. Damage to Strawberry Clover and subterranean clover is likely. A follow-up spray may be required to control subsequent germinations of seedlings which occur in old established stands of mature docks. Pastures should not be grazed for 2 to 3 weeks before spraying to allow sufficient growth of Docks and to minimise the check to pastures. DO NOT apply in Spring if pasture is intended for seed production.
Perennial Ryegrass for seed production	<u>Group A</u> Dock*, False Brome, Rat's Tail Fescue, Shivery Grass, Silvery Hair Grass, Soft Brome, Squirrel Tail Fescue, Sub Clover <u>Group B</u> Madrid Brome, Prairie Grass, Sorrel, Sterile Brome, Annual poa (Winter Grass), Yorkshire Fog	5.5 L in 160-220 L water/ha	NSW, ACT, Vic, Tas, SA only	Apply to established crops in the Autumn (late April-early June). The crop will show signs of yellowing 5-6 weeks after spraying. A reduction in total herbage production for 3-6 months will be experienced. Annual clovers will be affected. DO NOT apply to cultivar Medea Ryegrass as crop yields may be affected. DO NOT apply in Spring as crop damage will result. Group A weeds are susceptible and Group B weeds are moderately susceptible at the recommended rate. * Apply when docks are actively growing and have fully expanded leaves, just before flowering shoots emerge.
Potatoes	Docks	Boom Sprayer 2.8 L in 220-440 L water/ha	Vic, Tas only	Apply when Docks are actively growing and have fully expanded leaves, just before flowering shoots emerge. Apply before the potato foliage obscures the Docks.

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
Sugarcane	Awnless Barnyard Grass, Barnyard Grass, Crab Grass, Crowsfoot Grass, Green Summer Grass, Giant Paspalum, Hairy Panic Itch Grass, Johnson Grass, Para Grass, Summer Grass Guinea Grass (Seedlings only – up to 10 cm)	Boom Sprayer 8.5 L in 200-400 L water/ha Aircraft 8.5 L in a min. 22 L water/ha Spot Application* 200 mL in 9.8 L of water. In mixtures with Actril DS* use at least 55 L water/ha	Qld, NSW, ACT only	Crop stage: Apply post-emergence in plant or ratoon cane. Weed stage: Apply when weeds are actively growing, before flowering and before they exceed 200 to 250 mm in height unless otherwise indicated. Optimal results will be obtained when the relative humidity is high (over 80%) and temperature above 17°C. Residual control of grasses germinating from seed will persist for 6 to 10 weeks, depending on field conditions. Surfactant: 1000 g/L Non-ionic surfactant at 200 mL/100 L to improve wettability and coverage and reduce spray run-off. Directed application: Ideally the spray should be directed to minimise coverage of the cane foliage. Aircraft application may be necessary in salvage situations and could result in some crop damage. DO NOT apply tank mixes from aircraft. Caution: Certain varieties have not been screened for tolerance to this product. Treat a small area first, by the same technique as that to be used commercially to check tolerance. Variety Q68 should not be treated. * With knapsack or hand lance, ensure uniform coverage but do not spray to run-off.

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

WITHHOLDING PERIOD:

APPLE ORCHARDS, LUCERNE, ONIONS, PASTURES, PERENNIAL RYEGRASS:

DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER APPLICATION.

GENERAL INSTRUCTIONS

Note: The performance of Cheminova Asulam 400 Herbicide may be reduced if mixed with water which has a pH of less than 6.

MIXING

Half fill spray tank with clean water. Add the required amount of product to the spray tank and top up to required volume with water. Thoroughly agitate before applying. When using high volume applications, maintain agitation during application. DO NOT leave prepared spray in the tank overnight. If sprays are prepared in a bulk mixing tank at a central point, always stir thoroughly before drawing from the tank. Except for bracken control and sugar cane use, DO NOT add a wetting agent or crop damage may result.

APPLICATION

Boom Sprayer: Apply a minimum of 100 litres of water per hectare.

Aerial Application: Apply a minimum of 28 litres per hectare (lower rates have not been tested).

DO NOT apply tank mixes from aircraft.

Carpet Wiper: Calibrate the wiper equipment by adjusting the flow rate and tractor speed to ensure the herbicide is delivered at the recommended rate.

For 25 litre tank, the following rates can be used to deliver the recommended rate of Cheminova Asulam 400 per hectare.

Cheminova Asulam 400	4.0 L
Crop oil*	0.5 L
Water	20.5 L
Speed of Travel	10 km/hr
Flow rate	1 L/min

COMPATIBILITY

This product is compatible in the spray tank with Actril DS, petroleum oil, ethofumesate and atrazine. Mixtures should not be left overnight before spraying. As formulations of other manufacturers' products are beyond the control of Cheminova Australia Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

RESISTANT WEEDS WARNING

GROUP	R	HERBICIDE
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Cheminova Asulam 400 Herbicide is a member of the Carbamate group of herbicides and has diverse sites of action. For weed resistance management Cheminova Asulam 400 Herbicide is a Group R herbicide. Some naturally occurring weed biotypes resistant to Cheminova Asulam 400 Herbicide and other Group R 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 Cheminova Asulam 400 Herbicide or other Group R herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Cheminova Australia Pty Ltd accepts no liability for any losses that may result from the failure of Cheminova Asulam 400 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.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

STORAGE AND DISPOSAL

Store in the closed original container in a dry, well-ventilated area, as cool as possible. DO NOT store for prolonged periods in direct sunlight. Wash the spraying equipment thoroughly before and after use.

Leaflet

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.

Non-returnable containers only

Triple or preferably pressure rinse containers before disposal. Add rinsings to the 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 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.

100, 110L

Do not remove or 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 accordingly. When the drum is empty remove the dry valve coupler and return to the point of purchase.

1000L

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

Avoid contact with eyes and skin. DO NOT inhale spray mist. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

SAFETY DATA SHEET

Additional information is listed in the Safety Data Sheet available from www.cheminova.com.au

WARNING

This product must be used, handled and stored strictly as directed in accordance with this label, packaging and other reference material ("Directions"). To the extent permitted by law Cheminova Australia Pty Ltd and its related companies will have no liability for any injury, loss or damage arising from a failure to follow the Directions.

APVMA Approval No: 64144/61696

Batch No:

Date of Manufacture:

140123-T

Drummuster logo (relevant pack sizes)

FOR 24 HOUR SPECIALIST ADVICE IN EMERGENCY ONLY PHONE 1800 033 111
