
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

RAINBOW
ASULAM 400 SL
SELECTIVE HERBICIDE



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

GROUP	R	HERBICIDE
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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.

IMPORTANT: READ THE ATTACHED LEAFLET BEFORE OPENING OR USING

Contents:

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APVMA Approval No. 66715/54236

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 to 440 L water/ha Knapsack or Hand lance 1 part to 200 parts water	NSW, 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 to 5.0 L in 220 to 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 to 4.2 L in 220 to 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 to 440 L water/ha	Tas only	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.

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
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 BP Ulvaprone (2% of spray volume) in 110 to 330 L water/ha Motorised mister 12.0 L plus BP Ulvaprone (2% of spray volume) in 20 to 80 L water/ha Knapsack or hand lance 100 mL plus BP Ulvaprone (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.
	Common bracken	Carpet wiper 5.0 L plus PB Ulvaprone (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 to 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 minimize the check to pastures. DO NOT apply in spring if pasture is intended for seed production.
Perennial ryegrass for seed production	Group A Dock*, false brome, rat's tail fescue, shivery grass, silvery hair grass, soft brome, squirrel tail fescue, sub clover Group B Madrid brome, prairie grass, sorrel, sterile brome, annual poa (winter grass), Yorkshire fog	5.5 L in 160 to 220 L water/ha	NSW, 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 to 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
Sugar cane	Awnless barnyard grass, barnyard grass, crab grass, crowfoot grass, green summer grass, giant paspalum, hairy panic itch grass, Johnson grass, para grass, summer grass	Boom sprayer 8.5 L in 200 to 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 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: Wetspray 1000 at 200 mL/100 L to improve wettability and coverage and reduce spray runoff. Directed application: ideally the spray should be directed to minimize 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 PERIODS

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 ASULAM 400 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 tanks, the following rates can be used to deliver the recommended rate of ASULAM 400 per hectare;

ASULAM 400	4.0 L
BP Ulvapon [*]	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, Wetspray 1000, BP Ulvapon^{*}, ethofumesate and atrazine. Mixtures should not be left overnight before spraying. As formulations of other manufacturers' products are beyond the control of Shandong Rainbow, all mixtures should be tested prior to mixing commercial quantities.

RESISTANT WEEDS WARNING

GROUP	R	HERBICIDE
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RAINBOW ASULAM 400 SL SELECTIVE HERBICIDE is a member of the carbamates group of herbicides. The product has the inhibitors of dihydropteroate synthase (DHP inhibitors) mode of action. For weed resistance management ASULAM 400 is a Group R herbicide. Some naturally occurring weed biotypes resistant to ASULAM 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 ASULAM 400 or other Group R herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Shandong Rainbow International Co Ltd accepts no liability for any losses that may result from the failure of ASULAM 400 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

KEEP OUT OF REACH OF CHILDREN. 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. Triple or (preferably) pressure rinse containers before disposal. Add rinsings to the spray tank. DO NOT dispose of undiluted chemicals on-site. Break, crush or puncture and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

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.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet (MSDS). A material safety data sheet is available from Shandong Rainbow on request.

CONDITION OF SALE

The use of RAINBOW ASULAM 400 SL SELECTIVE HERBICIDE being beyond the control of the manufacturer, no warranty expressed or implied is given by Shandong Rainbow International Co Ltd, 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 Shandong Rainbow International Co Ltd accepts no responsibility for any consequence whatsoever from the use of this product.

*Other trademarks

Batch No.:

Date of Manufacture: