READ SAFETY DIRECTIONS BEFORE OPENING OR USING

ASULOX®

SELECTIVE HERBICIDE

RLP Approved

ACTIVE CONSTITUENT: 400 g/L ASULAM
present as the sodium salt

GROUP R HERBICIDE

For the control of bracken fern in pastures, grasses in sugarcane, and a range of weeds and grasses in crops and pastures as specified in the DIRECTIONS FOR USE Table

IMPORTANT: READ THE ATTACHED BOOKLET BEFORE USE

CONTENTS (1 L, 5 L, 10 L, 20 L, 110 L)

® Trademark

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BATCH No. DOM:

APVMA Approval No. 31569/57854

STORAGE AND DISPOSAL

Keep out of reach of children. Store in the 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 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 bury empty containers in a local authority landfill. If no landfill is available, bury the empty containers below 500 mm 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.

For refillable containers

Empty contents fully into application equipment. Close all valves and return to point of supply or designated collection point 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 13 11 26.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet available from the supplier.

CONDITIONS OF SALE: United Phosphorus accepts responsibility for the consistent quality of the product; however since the use and application of the product is beyond control, the company accepts no responsibility whatsoever for any loss, damage or other result following the use of the product whether used in accordance with directions or not; other than those mandatorily imposed by statutes, the liability is limited to the replacement of the goods and is conditional upon a claim made in writing and, where necessary, a sufficient part of the goods being returned for proper examination by the company within thirty days of sale.

Asulox® is a registered trademark

Bar Code

Drummuster logo

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DIRECTIONS FOR USE

RESTRAINTS:

DO NOT apply by aircraft (except for sugarcane).

DO NOT apply if rain is likely to fall within 3 hours (24 hours for bracken).

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
Apple Orchards	Docks (*Rumex* spp.)	**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 (*Rumex obtusifolius*), curled dock (*Rumex crispus*), fiddle dock (*Rumex pulcher*)	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 (*Rumex* spp.)	**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 (*Rumex* spp.)	**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 (*Rumex obtusifolius*), curled dock (*Rumex crispus*)	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 programme 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 (*Pteridium esculentum*)	**Boom Sprayer** 12.0 L **Plus** BP Ulvapron® (2% of spray volume) in 110 to 330 L water/ha **Motorised Mister** 12.0 L **Plus** BP Ulvapron (2% of spray volume) in 20 to 80 L water/ha **Knapsack Or Hand Lance** 100 mL **Plus** BP Ulvapron (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 regrowth. Ensure uniform coverage of spray over Bracken. With knapsack or hand lance, spray to give complete coverage of fronds but do not spray to runoff. DO NOT apply if rain is likely within 24 hours.
		Carpet Wiper 5.0 L **Plus** BP Ulvapron (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 regeneration of 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 or clumps, some plants may not be contacted by the herbicide solution. In these cases, repeat treatments may be necessary.
	Broadleaf dock (*Rumex obtusifolius*), curled dock (*Rumex crispus*)	**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 minimise the check to pastures. DO NOT apply in spring if pasture is intended for seed production.

CROP	WEEDS CONTROLLED	RATE	STATE	CRITICAL COMMENTS
Perennial Ryegrass for seed production	**Group A** Docks* (*Rumex* spp.), false brome (*Brachypodium distachyon*), rat's tail fescue (*Vulpia myuros*), shivery grass (*Briza minor*), silvery hair grass (*Aira caryophyllea*), soft brome (*Bromus hordeaceus*), squirrel tail fescue (*Vulpia bromoides*), sub clover (*Trifolium subterraneum*) **Group B** Madrid brome (*Bromus madritensis*), prairie grass (*Bromus catharticus*), sorrel (*Rumex acetosella*), sterile brome (*Bromus sterilis*), annual poa (winter grass) (*Poa annua*), yorkshire fog (*Holcus lanatus*)	5.5 L in 160 to 220 L water/ha	NSW, Vic, Tas, SA only	Apply to established crops in the autumn (late April to early June). The crop will show signs of yellowing 5 to 6 weeks after spraying. A reduction in total herbage production for 3 to 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 but before the emergence of the flowering shoots.
Potatoes	Docks (*Rumex* spp.)	**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 (*Echinochloa colona*), barnyard grass (*Echinochloa crus-galli*), crab grass (*Digitaria sanguinalis*), crowsfoot grass (*Eleusine indica*), green summer grass (*Brachiaria subquadripara*), giant paspalum (*Paspalum urvillei*), hairy panic (*Panicum effusum*), itch grass (*Rottboellia cochinchinensis*), johnson grass (*Sorghum halepense*), para grass (*Brachiaria mutica*), summer grass (*Digitaria ciliaris*)	**For Boom Sprayer** 8.5 L in 200 to 400 L water/ha **For Aircraft** 8.5 L in a min. 22 L water/ha. **For Spot Application#** 200 mL in 9.8 L of water. In mixtures with Actril® DS use at least 55 L water/ha.	Qld, NSW, WA, NT 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:** Add a non-ionic wetting agent at 250 mL/100 L spray to improve wettability and coverage and reduce spray runoff. **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. **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 runoff.
	Guinea grass (*Panicum maximum*) (Seedlings only – up to 10 cm)			

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 Asulox may be reduced if mixed with water which has a pH of less than 6.

Resistant Weeds Warning:

GROUP	R	HERBICIDE

Asulox Selective Herbicide is a member of the Carbamate group of herbicides and has inhibitor of dihydropteroate synthase (DHI inhibitor) mode of action. For weed resistance management Asulox is a Group R herbicide. Some naturally occurring weed biotypes resistant to Asulox 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 Asulox or other Group R herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, United Phosphorus Ltd accepts no liability for any losses that may result from the failure of Asulox to control resistant weeds.

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 of water 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 a 25 litre tank, the following rates can be used to deliver the recommended rate of Asulox per hectare.

Asulox	4.0 Litres
BP Ulvapron	0.5 Litre
Water	20.5 Litres
Speed of Travel	10 km/hr
Flow Rate	1 Litre/minute

Compatibility
This product is compatible in the spray tank with Actril DS, BP Ulvapron and atrazine. Mixtures should not be left overnight before spraying. As formulations of other manufacturers' products are beyond the control of United Phosphorus Ltd, all mixtures should be tested prior to mixing commercial quantities.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS
DO NOT apply under weather conditions or from spraying equipment which could be expected to cause drift onto nearby plants and adjacent crops, crop-lands or pasture.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT
DO NOT contaminate dams, ponds, waterways or drains with the product or used container.

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