## **READ SAFETY DIRECTIONS BEFORE OPENING OR USING**



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



# GROUP **18** 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 LEAFLET/BOOKLET BEFORE USE.

### **CONTENTS: 20L**

UPL Australia Pty Ltd Level 3, 70 Hindmarsh Square, Adelaide, SA, 5000 Tel: (08) 8112 0900 Fax: (08) 8112 0999





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# **ASULOX**<sup>°</sup> SELECTIVE HERBICIDE

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#### 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-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 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.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately. **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

First aid is not generally required. If in doubt, contact a Poisons Information Centre (phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

#### SAFETY DATA SHEET

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

#### **CONDITIONS OF SALE**

UPL Australia Pty Ltd 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.

Additional statements required by Globally Harmonised System for classification and labelling of chemicals (GHS) and Safe Work Australia:

Harmful if swallowed. Do not eat, drink or smoke when using this product.

In an Emergency Dial **000** Police or Fire Brigade 24 Hour Emergency Response Service Australia **1800 033 111** International **+61 3 9663 2130** 

### **BATCH NO**

DOM

APVMA Approval No: 31569/135841 ® Registered Trademark of UPL Australia Pty Ltd



#### 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).

#### DIRECTIONS FOR USE

| CROP                     | WEEDS CONTROLLED  | RATE  | STATE                         | CRITICAL COMMENTS   |
|--------------------------|---|---|-------------------------------|---|
| Apple Orchards           | Docks<br>( <i>Rumex</i> spp.)   | Boom Sprayer<br>4.2 L in 220 to<br>440 L water/ha<br>Knapsack Or<br>Hand Lance<br>1 part to 200 parts<br>water. | NSW, Vic, Tas,<br>SA, WA only | Apply when docks are actively growing and have fully expanded leaves, just<br>before flowering shoots emerge. With knapsack or hand lance, ensure uniform<br>coverage but do not spray to run-off. Apply only to established trees.<br>DO NOT graze the area to be sprayed for 7 days before and 21 days after<br>application.  |
| Hops                     | Broadleaf dock<br>(Rumex obtusifolius),<br>curled dock (Rumex<br>crispus), fiddle dock<br>(Rumex pulcher) | 3.5 to 5.0 L in<br>220 to 440 L<br>water/ha   | Vic, Tas only                 | Apply before the hop plants have emerged. Apply the higher rate where Fiddle<br>Dock is present or where docks are mainly old, established plants.  |
| Lucerne -<br>established | Docks ( <i>Rumex</i> spp.)  | Boom Sprayer<br>2.8 to 4.2 L in 220<br>to 440 L water/ha  | All States                    | Lucerne should be at least one year old. Apply when docks are actively growing<br>and have fully expanded leaves, just before flowering shoots emerge. Apply<br>lower rate if Curled Dock and Broadleaf Dock are present. Apply higher rate if<br>other docks are present.<br>DO NOT apply in spring if pasture is intended for seed production.  |
| Onions                   | Docks ( <i>Rumex</i> spp.)  | Knapsack Or<br>Hand Lance<br>1 part to 200 parts<br>water   | Tas only                      | Apply when docks are actively growing and have fully expanded leaves, just<br>before flowering shoots emerge. Ensure uniform spray coverage of docks but<br>do not spray to run-off. DO NOT apply as an overall spray as crop damage may<br>result. Sprayed onions may show a slight yellowing but they will normally recover<br>quickly if good growing conditions exist.              |
| Oilseed<br>Poppies       | Broadleaf dock<br>( <i>Rumex obtusifolius</i> ),<br>curled dock ( <i>Rumex</i><br><i>crispus</i> )        | 2.5 L in 220 to<br>440 L water/ha   | Tas only                      | Crop stage: Spray any time after the 4 to 6 leaf stage.<br>Weed stage: Apply when docks are actively growing and have fully expanded<br>leaves, just before flowering shoots emerge. The range of control is extended<br>with a spray programme in combination with ethofumesate as recommended<br>by poppy contracting companies or the Department of Primary Industries,<br>Tasmania. |

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#### DIRECTIONS FOR USE Continued

| CROP  | WEEDS CONTROLLED  | RATE  | STATE      | CRITICAL COMMENTS  |
|---|---|---|------------|--|
| EROP<br>Pastures<br>established &<br>improved pastures<br>of: Chewing's<br>Fescue, Cocksfoot,<br>Perennial<br>Ryegrass, Red<br>Clover, Tall Fescue,<br>White Clover | Common bracken<br>(Pteridium<br>esculentum)                               | Boom Sprayer<br>12.0 L<br>Plus<br>BP Ulvapron® (2% of spray<br>volume) in 110 to 330 L<br>water/ha<br>Motorised Mister<br>12.0 L<br>Plus<br>BP Ulvapron (2% of spray<br>volume) in 20 to 80 L<br>water/ha<br>Knapsack Or Hand<br>Lance<br>100 mL<br>Plus<br>BP Ulvapron (2% of spray<br>volume) in 9.8 L water. | All States | Temporary sorch is likely to occur in perennial pastures. Apply during late<br>April to early June after the autumn re-growth has fully expanded, and<br>before the first frosts of the season. Where old mature fronds exist, the<br>Bracken should be slashed or burned during October or November in the<br>year prior to spraying. Results are first seen as a lack of spring regrowth.<br>Ensure uniform coverage of spray over Bracken. With knapsack or hand<br>lance, spray to give complete coverage of fronds but do not spray to runoff.<br>DO NOT apply if rain is likely within 24 hours.   |
|   |   | Carpet Wiper<br>5.0 L<br>Plus<br>BP Ulvapron (2% of spray<br>volume)/ha   | Vic only   | For East Gippsland district only. To apply the recommended rate it is<br>necessary to select an appropriate combination of flow rate, tractor speed<br>and herbicide dilution. Refer to General Instructions for details. This rate<br>will control bracken growing at a density of 25 fronds per square metre.<br>The bracken should be slashed during late spring or early summer in the<br>year prior to spraying to ensure regeneration of fronds of similar age. The<br>bracken should then be wiped in the following autumn before the first<br>frosts of the season when the regenerated fronds are fully mature. Where<br>fronds are of variable height or occur in dense infestation or clumps, some<br>plants may not be contacted by the herbicide solution. In these cases,<br>repeat treatments may be necessary. |
|   | Broadleaf dock (Rumex<br>obtusifolius),<br>curled dock (Rumex<br>crispus) | Boom Sprayer<br>2.8 L in 220 to 440 L<br>water/ha   | All States | Apply when docks are actively growing and have fully expanded leaves, just<br>before flowering shoots emerge. Slight yellowing of some pasture species<br>may occur but they will normally recover quickly if good growing conditions<br>exist. Damage to Strawberry Clower and Subterranean Clower is likely. A<br>follow-up spray may be required to control subsequent germinations of<br>seedlings which occur in old established stands of mature docks. Pastures<br>should not be grazed for 2 to 3 weeks before spraying to allow sufficient<br>growth of docks and to minimise the check to pastures.<br>Do NOT apply in spring if pasture is intended for seed production.  |

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#### DIRECTIONS FOR USE Continued

| CROP  | WEEDS CONTROLLED   | RATE  | STATE                        | CRITICAL COMMENTS  |
|---|--|---|------------------------------|--|
| Perennial<br>Ryegrass<br>for seed<br>production | Group A<br>Docks' (Rumex spp.), false brome<br>(Brachypodium distachyon),<br>rat's tail fescue<br>(Vulpia myuros),<br>shivery grass<br>(Briza mino/),<br>silvery hair grass (Aira caryophyllea),<br>soft brome<br>(Bromus hordeaceus),<br>squirrel tail fescue (Vulpia bromoides),<br>sub clover (Trifolium subterraneum)                                      | 5.5 L in 160 to<br>220 L water/ha   | NSW, Vic,<br>Tas, SA<br>only | Apply to established crops in the autumn (late April to early June). The crop will<br>show signs of yellowing 5 to 6 weeks after spraying.<br>A reduction in total herbage production for 3 to 6 months will be experienced.<br>Annual clovers will be affected.<br>DO NOT apply to cultivar Medea Ryegrass as crop yields may be affected.<br>DO NOT apply to cultivar Medea Ryegrass as crop yields may be affected.<br>DO NOT apply in spring as crop damage will result.<br>Group A weeds are susceptible and Group B weeds are moderately susceptible<br>at the recommended rate.<br>* Apply when docks are actively growing and have fully expanded leaves, just<br>before flowering shoots emerge but before the emergence of the flowering<br>shonts.  |
|   | Group B<br>Madrid brome (Bromus madritensis),<br>prairie grass (Bromus catharticus),<br>sorrel (Rumex acetasella),<br>sterile brome (Bromus sterilis), annual<br>poa (winter grass)<br>(Poa annua),<br>yorkshire fog (Hokus lanatus)   |   |                              |  |
| Potatoes  | Docks ( <i>Rumex</i> spp.)   | Boom Sprayer<br>2.8 L in 220 to<br>440 L water/ha   | Vic, Tas<br>only             | Apply when docks are actively growing and have fully expanded leaves, just<br>before flowering shoots emerge. Apply before the potato foliage obscures the<br>docks.   |
| Sugar<br>Cane                                   | Awnless barnyard grass<br>(Echinochloa colona),<br>barnyard grass<br>(Echinochloa crus-galli),<br>crab grass (Digitaria sanguinalis),<br>crowsfoot grass (Eleusine indica),<br>green summer grass<br>(Brachiaria<br>subquadripara),<br>giant paspalum (Paspalum urvillei),<br>hairy panic (Panicum effusum),<br>itch grass<br>(Rotabeelia<br>cochinchinensis), | For Boom<br>Sprayer<br>8.5 L in 200 to<br>400 L water/ha<br>For Aircraft<br>8.5 L in a min.<br>22 L water/ha.<br>For Spot<br>Application <sup>#</sup><br>200 mL in 9.8 L<br>of water. | Qld, NSW,<br>WA, NT<br>only  | Crop stage: Apply post-emergence in plant or ratoon cane.<br>Weed stage: Apply when weeds are actively growing, before flowering and<br>before they exceed 200 to 250 mm in height unless otherwise indicated. Optimal<br>results will be obtained when the relative humidity is high (over 80%) and<br>temperature above 17°C. Residual control of grasses germinating from seed will<br>persist for 6 to 10 weeks, depending on field conditions.<br>Surfactant: Add a non-ionic wetting agent at 250 mL/100 L spray to improve<br>wettability and coverage and reduce spray runoff.<br>Directed application: Ideally the spray should be directed to minimise<br>coverage of the cane foliage. Aircraft application may be necessary in salvage<br>situations and could result in some crop damage. |
|   | johnson grass (Sorghum halepense),<br>para grass (Brochiaria mutica),<br>summer grass (Digitaria ciliaris)<br>Guinea grass<br>(Panicum maximum)<br>(Seedlings only – up to 10 cm)  | In mixtures with<br>Actril <sup>®</sup> DS use<br>at least 55 L<br>water/ha.  |                              | Caution: Certain varieties have not been screened for tolerance to this product.<br>Treat a small area first, by the same technique as that to be used commercially<br>to check tolerance.<br>Variety Q68 should not be treated.<br># With knapsack or hand lance, ensure uniform coverage but do not spray to<br>runoff.  |

# 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 Asulox 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 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 |

#### **RESISTANT WEEDS WARNING**



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 18 herbicide.

Some naturally occurring weed biotypes resistant to Asulox and other Group 18 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 18 herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, UPL Australia Pty Ltd accepts no liability for any losses that may result from the failure of Asulox to control resistant weeds.

#### 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 UPL Australia Pty 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.

#### STORAGE AND DISPOSAL

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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

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Additional statements required by Globally Harmonised System for classification and labelling of chemicals (GHS) and Safe Work Australia: Harmful if swallowed. Do not eat, drink or smoke when using this product.

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