TITAN

Asulam 400
Herbicide

ACTIVE CONSTITUENT:
400g/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.

IMPORTANT: READ THOROUGHLY BEFORE OPENING OR USING THIS PRODUCT.

APVMA Approval No.: 62510/0208  Pack Size: 5L, 10L, 20L

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IN A TRANSPORT EMERGENCY
DIAL 000
POLICE OR FIRE BRIGADE

TRANSPORT AND HANDLING
NOT A DANGEROUS GOOD
ACCORDING TO THE AUSTRALIAN DANGEROUS GOODS (ADG) CODE
FOR TRANSPORT BY ROAD AND RAIL.
## Directions for Use

**Restraints:**
- DO NOT apply by aircraft (except for sugar cane).
- DO NOT apply if rain is expected within 3 hours (24 hours for bracken).

### Crop Table

<table>
<thead>
<tr>
<th><strong>Crop</strong></th>
<th><strong>Weeds Controlled</strong></th>
<th><strong>Rate</strong></th>
<th><strong>State</strong></th>
<th><strong>Critical Comments</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple Orchards</td>
<td>Docks</td>
<td><strong>Boon Sprayer</strong> 4.2L in 220 to 440L water/ha</td>
<td>NSW, VIC, TAS, SA, WA only</td>
<td>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.</td>
</tr>
<tr>
<td>Hops</td>
<td>Broadleaf Dock, Curled Dock, Fiddle Dock</td>
<td>3.5 to 5.0L in 220 to 440L water/ha</td>
<td>VIC, TAS only</td>
<td>Apply before the hop plants have emerged. Apply the higher rate where Fiddle Dock is present or where docks are mainly old, established plants.</td>
</tr>
<tr>
<td>Lucerne - established</td>
<td>Docks</td>
<td><strong>Boon Sprayer</strong> 2.8 to 4.2L in 220 to 440L water/ha</td>
<td>ALL STATES</td>
<td>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.</td>
</tr>
<tr>
<td>Onions</td>
<td>Docks</td>
<td><strong>Knapsack or Hand Lance</strong> 1 part to 200 parts water</td>
<td>TAS only</td>
<td>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.</td>
</tr>
<tr>
<td>Oilseed poppies</td>
<td>Broadleaf Dock, Curled Dock</td>
<td><strong>Boom Sprayer</strong> 2.5L in 220 to 440L water/ha</td>
<td>ALL STATES</td>
<td><strong>Crop stage:</strong> Spray any time after the 4 to 6 leaf stage. <strong>Weed stage:</strong> 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.</td>
</tr>
<tr>
<td>Pastures established &amp; improved pastures of: Chewing’s Fescue, Cockfoot, Perennial Ryegrass, Red Clover, Tall Fescue, White Clover</td>
<td>Common Bracken</td>
<td><strong>Boom Sprayer</strong> 12.0L plus BP Ulvapron* (2% of spray volume) in 110 to 330L water/ha</td>
<td>ALL STATES</td>
<td>Temporary scorch is likely to occur in perennial pastures. Apply during late April to early June after the Autumn regrowth 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.</td>
</tr>
<tr>
<td>Pastures established &amp; improved pastures of: Chewing’s Fescue, Cockfoot, Perennial Ryegrass, Red Clover, Tall Fescue, White Clover</td>
<td>Common Bracken</td>
<td><strong>Carpet Wiper</strong> 5.0L plus BP Ulvapron* (2% of spray volume)</td>
<td>VIC only</td>
<td>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 infestations of clumps, some plants may not be contacted by the herbicide solution. In these cases, repeat treatment may be necessary.</td>
</tr>
<tr>
<td>Pastures established &amp; improved pastures of: Chewing’s Fescue, Cockfoot, Perennial Ryegrass, Red Clover, Tall Fescue, White Clover</td>
<td>Broadleaf Dock, Curled Dock</td>
<td><strong>Boom Sprayer</strong> 2.8L in 220 to 440L water/ha</td>
<td>ALL STATES</td>
<td>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.</td>
</tr>
</tbody>
</table>
### Perennial Ryegrass for seed production

**Group A**
- Dock*
- False Brome
- Rat’s Tail Fescue
- 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

- **Rate**: 5.5L in 160 to 220L water/ha
- **State**: 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

- **Weeds Controlled**: Docks

- **Rate**: 2.8L in 220 to 440L water/ha

- **State**: 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.

### Sugar Cane

- **Weeds Controlled**: Awnless Barnyard Grass, Barnyard Grass, Crab Grass, Crowsfoot Grass, Green Summer Grass, Giant Paspalum, Hairy Panic Itch Grass, Johnson Grass, Para Grass, Summer Grass,

- **Rate**: 8.5L in 200 to 400L water/ha

- **Surfactant**: Wetspray 1000 at 200mL/100L to improve wettability and coverage and reduce spray run-off.

- **State**: 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 250mm 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 200mL/100L 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.

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**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 TITAN 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 TITAN Asulam 400 Herbicide per hectare:

<table>
<thead>
<tr>
<th>TITAN Asulam 400 Herbicide</th>
<th>4.0L</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP Ulvapon*</td>
<td>0.5L</td>
</tr>
<tr>
<td>Water</td>
<td>20.5L</td>
</tr>
<tr>
<td>Speed of Travel</td>
<td>10km/hr</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>1L/min</td>
</tr>
</tbody>
</table>

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 TITAN AG Pty Ltd, all mixtures should be tested prior to mixing commercial quantities.

RESISTANT WEEDS WARNING
TITAN Asulam 400 Herbicide is a member of the Carbamate group of herbicides and has diverse sites of action. For weed resistance management TITAN Asulam 400 Herbicide is a Group R herbicide. Some naturally occurring weed biotypes resistant to TITAN 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 TITAN Asulam 400 Herbicide or other Group R herbicides.
Since the occurrence of resistant weeds is difficult to detect prior to use, TITAN AG Pty Ltd accepts no liability for any losses that may result from the failure of TITAN 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. 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 13 11 26.

MATERIAL SAFETY DATA SHEET
Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for TITAN Asulam 400 Herbicide is available from TITAN AG Pty Ltd on request. Call Customer Service on (02) 9986 2943 or visit www.titanag.com.au

CONDITIONS OF SALE
TITAN AG Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on TITAN AG’s skill or judgment in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of TITAN AG Pty Ltd has any authority to add to or alter these conditions.
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