**HERBICIDE**
Active Constituent: 250 g/L IMAZAPYR present as isopropylamine salt

**GROUP B HERBICIDE**

For the control of various annual and perennial weeds in non-crop situations as per the DIRECTIONS FOR USE table.

**FEATURES**
Fewer repeat applications needed. Can be mixed with glyphosate for faster knockdown activity.

**BENEFITS**
Savings in respect to application costs

**MODE OF ACTION**
ARSENAL 250A is an AHAS/ALS inhibitor which translocates rapidly to growing tips in roots and shoots, interfering with production of essential amino acids and thus preventing new cell growth.

**PACK SIZES**
5 L, 20 L

<table>
<thead>
<tr>
<th>U.N. Number</th>
<th>Correct Shipping Name</th>
<th>Class</th>
<th>Subsidiary Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>Not considered a Dangerous Good</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZCHEM Code</th>
<th>Poisons Schedule</th>
<th>Emergency Guide</th>
<th>Packaging Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>Exempt</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
GENERAL INSTRUCTIONS

ARSENAL is an aqueous solution of herbicide which will kill a range of standing weeds and emerging seedlings. It stops growth rapidly, although symptoms may take over 30 days to develop.

Affected plants are discoloured and often growth is distorted.

The active material in ARSENAL is rapidly absorbed through foliage and roots, and translocated throughout plants.

Foliation treatments will provide pre-emergence control as the active material is released to the soil following plant decay.

Residual control of weeds, for which the lower rate of ARSENAL is recommended, will increase when the higher rate is used.

RESISTANT WEEDS WARNING

ARSENAL Herbicide is a member of the imidazolinone group of herbicides. ARSENAL has the inhibition of acetolactate synthase (ALS) mode of action. For weed resistance management, ARSENAL is a Group B herbicide. Some naturally-occurring weed biotypes resistant to ARSENAL and other Group B 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 ARSENAL or other Group B herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, BASF Australia Ltd accepts no liability for any losses that may result from the failure of ARSENAL to control resistant weeds.

APPLICATION

Faster control of standing weeds will result if growing conditions are favourable at and after application.

Rainfall within two hours of the spray mixture drying on leaves may result in reduced weed control.

SPRAYING INSTRUCTIONS

For medium volume spraying, apply through a spray boom calibrated to ensure even coverage. Use spray nozzles suitable to prevent spray drift onto surrounding desirable vegetation.

For high volume application, use a hand gun or knapsack to apply sufficient spray to wet the surface visibly without producing run-off.

MIXING

Pour the required amount of ARSENAL into a spray container which already holds the total amount of water required.

Mix thoroughly. If ARSENAL is added during filling, foaming may occur. If excessive foaming is a problem, add a suitable antifoaming agent.

Consult your distributor for specific information.

ARSENAL may be applied in hard or soft water. The product is corrosive to mild steel.

Use ONLY stainless steel, fibreglass, plastic or plastic-lined containers for mixing, storage and application.

COMPATIBILITY

For faster knockdown of weeds, certain other herbicides may be mixed with ARSENAL Herbicide. Bipyridyl herbicides (eg. paraquat) are NOT compatible with ARSENAL. Mixtures of this type will result in poor weed control.

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.

Do NOT apply on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.

Do NOT apply where run-off water may flow onto agricultural land or other desirable vegetated areas. Dispose of washings away from desirable plants and their roots.

PROTECTION OF LIVESTOCK

Low hazard to bees – may be applied to plants at any time.

Do NOT graze or cut for stock feed, vegetation which has been treated with ARSENAL.
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, cool, well-ventilated area. Do NOT store for prolonged periods in direct sunlight. Triple or preferably pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the 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.

SAFETY DIRECTIONS

Avoid inhaling spray mist. Will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing and using the prepared spray, wear rubber gloves. Wash hands after use. After each days use wash rubber gloves.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Telephone 131126 Australia-wide.

MSDS

Additional information is listed in the Material Safety Data Sheet.

CONDITIONS OF SALE: All conditions and warranties rights and remedies implied by law or arising in contract or tort whether due to the negligence of BASF Australia Ltd. or otherwise are hereby expressly excluded so far as the same may legally be done provided however that any rights of the Buyer pursuant to non excludable conditions or warranties of the Trade Practices Act 1974 or any relevant legislation of any State are expressly preserved but the liability of BASF Australia Ltd. or any intermediate Seller pursuant thereto shall be limited if so permitted by the said legislation to the replacement of the goods sold or the supply of equivalent goods and all liability for indirect or consequential loss or damage of whatsoever nature is expressly excluded. This product must be used or applied strictly in accordance with the instructions appearing hereon. This product is solely sold for use in Australia and must not be exported without the prior written consent of BASF Australia Ltd.

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NRA Approval No.: 47465

FOR SPECIALIST ADVICE IN AN EMERGENCY ONLY
PHONE 1 800 033 111
TOLL FREE – ALL HOURS – AUSTRALIA-WIDE

BASF Australia Ltd
ABN 62 008 437 867
Norwest Business Park, 7 Maitland Place
Baulkham Hills NSW 2153
Customer Service Telephone: 1800 635 550
Customer Service Fax: 1800 630 005
Product Information Line: 1800 501 940
Fax On Demand: 0500 544 044
**DIRECTIONS FOR USE**

**RESTRAINT:** Do NOT apply by AIRCRAFT as spray drift may cause damage to desirable surrounding species.

<table>
<thead>
<tr>
<th>SITUATION</th>
<th>WEED</th>
<th>STATES</th>
<th>RATE</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
</table>
| Around agricultural buildings and other farm non-crop situations,        | Annual ryegrass (*Lolium rigidum*), barnyard grass (*Echinochloa crus-galli*), blady grass (*Imperata cylindrica*), buckbush (*Salsola kali*), deadnettle (*Lamium amplexicaule*), feathertop Rhodes grass (*Chloris virgata*), fleabane (*Coryza canadensis*), haxem scent (*Melilotus indicus*), liverseed grass (*Urochloa panicoides*), London rocket (*Sisymbrium irio*), Mayne's pest (*Verbena tenuisecta*), medic (*Medicago* spp.), mintweed (*Salvia reflexa*), blackberry nightshade (*Solanum nigrum*), Paterson's curse (*Echium plantagineum*), plains grass (*Stipa aristiglumis*), prickly lettuce (*Lactuca serriola*), purple top (*Verbena bonariensis*), scentless top (*Capillipedium* spp.), sedges (*Cyperus* spp.), slender celery (*Apium leptophyllum*), St Barnaby's thistle (*Centaurea solstitialis*), summer grasses (*Digitaria* spp.), thornapples (*Datura* spp.), turnip weed (*Rapistrum rugosum*), variegated thistle (*Silybum marianum*), wasy grass (*Paspalum urvillei*), Warrego grass (*Paspalidium jubiflorum*), wild oats (*Avena* spp.), wild turnip (*Brassica tournefortii*), wireweed (*Polygonum aviculare*) | All States | 4 L/ha | Applications can be made pre- or post-emergence. Post-emergence applications also provide pre-emergence control.  
Medium Volume: 4 L ARSENAL should be applied using spray volumes ranging between 50 and 200 L/ha.  
High Volume: Apply sufficient spray to wet the surfaces visibly without producing run-off. Measure how much spray is required to cover 10 m x 10 m. Add ARSENAL at the rate of 40 mL in this measured volume. |
| All States Applications can be made pre- or post-emergence. Post-emergence applications also provide pre-emergence control.  
Medium Volume: 6 L ARSENAL should be applied using spray volumes ranging between 50 and 200 L/ha.  
High Volume: Apply sufficient spray to wet the surfaces visibly without producing run-off. Measure how much spray is required to cover 10 m x 10 m. Add ARSENAL at the rate of 60 mL in this measured volume. |
| Bokhara clover (*Melilotus albus*), Zbracken (suppression only) (*Pteridium esculentum*), capeweed (*Arctotheca calendula*), couch (*Cynodon dactylon*), docks (*Rumex* spp.), Johnson grass (*Sorghum halepense*), pansies (suppression only) (*Panicum* spp.), paspalum (*Paspalum dilatatum*), queenland bluegrass (* Dichanthium sericeum*), stinging nettle (*Urtica incisa*) | All States | 6 L/ha |  

Rubber vine (*Cryptostegia grandiflora*) | All States | 4 mL/L water | Post-emergence application. Apply sufficient spray to wet the surface visibly to the point of run-off. For effective control, apply when the plant is actively growing and not stressed, yellowing or bearing pods. Flowering is a good indication of the best time for application. Use high volume application as detailed in the General Instructions section. |
<table>
<thead>
<tr>
<th>SITUATION</th>
<th>WEED</th>
<th>STATES</th>
<th>RATE</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Around agricultural buildings and other farm non-crop situations, commercial, industrial, and public service areas, rights of way and waste land, away from desirable vegetation, (continued)</td>
<td>Thunbergia (Thunbergia spp.)</td>
<td>Qld only</td>
<td>7.5 mL/L water</td>
<td>Post-emergence application. Apply sufficient spray to wet the surface visibly to the point of run-off. For effective control, apply when the plant is actively growing. Use high volume application as detailed in the General Instructions section.</td>
</tr>
</tbody>
</table>

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.
HERBICIDE
Active Constituent: 250 g/L IMAZAPYR present as isopropylamine salt

Registered to: TROPICAL WEEDS RESEARCH CENTRE
NATAL DOWNS ROAD
CHARTERS TOWERS 4820 QLD

FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT

PERMIT NUMBER - PER3931
This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:
• supply any requested information to the NRA;
• inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
• comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in 1. Persons to use the products listed in 2. Products for the minor off-label use specified in 3. Directions for Use in the jurisdictions listed in 4. States.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in 1. Persons must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

This permit is in force from 4 January 2001 to 4 January 2004.

It is in force until it expires or it is cancelled, suspended or surrendered.

REASON FOR ISSUE OF PERMIT
There are no products registered for the control of hymenachne. Hymenachne is a weed of national significance and appropriate control measures are required. The weeds of National Significance Hymenachne Strategic Plan states that there is at least 1000 ha infested with hymenachne. However, the weed occurs in distinct areas and the permit will be for non-aquatic areas only, which limits the area over which the weed can be targeted by the use covered by this permit.

1. Persons
Persons generally trained in the use of agricultural chemicals.

2. Products
ARSENAL HERBICIDE
Containing: 250 g/L IMAZAPYR present as ISOPROPYLAMINE SALT as its only active constituent.

3. Directions for Use

<table>
<thead>
<tr>
<th>Crop</th>
<th>Pest</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL OF HYMENACHNE</td>
<td>amplexicaulis</td>
<td>Apply at a rate of 8 L of product per hectare or 250 mL per 100 L.</td>
</tr>
</tbody>
</table>

Critical Use Comments:
• Apply using knapsack, handgun or boomspray.
• Add Uptake Spraying Oil paraffinic oil surfactant at 2 L/ha for optimum results.
• Spray plants prior to flowering. (Peak flowering is from April to August.)
• Repeat spray application when reinfestation occurs.
• Burning approximately 90 days after initial herbicide application will control surviving plants and significantly reduce seedling establishment.
• Avoid chemical drift into waterways.

4. States
Qld only.

CONDITIONS OF PERMIT
This permit provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label. PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT. DO NOT spray where runoff, particularly into waterways or areas of standing water, may occur. THIS PERMIT has been granted in response to requests from persons other than the manufacturers of products which have been included in this permit. When assessing the proposed use the NRA will often seek advice from these manufacturers. As these manufacturers have not sought this permit, they should not be held responsible for the use of their products as specified in this permit.

FOR A FULL COPY OF THIS PERMIT, PLEASE CONTACT BASF AUSTRALIA LTD ON 1800 501 940
PERMIT DETAILS FOR NUMBER – PERMIT 3947

ARSENAL
HERBICIDE
Active Constituent: 250 g/L IMAZAPYR present as isopropylamine salt

FOR MINOR OFF-LABEL-USE OF A REGISTERED AGVET CHEMICAL PRODUCT

PERMIT NUMBER - PER3947
This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:
• supply any requested information to the NRA;
• inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
• comply with a lawful direction or requirement of an inspector.
This permit for the reasons given below, allows any person listed in 1. Persons to use the products listed in 2. Products for the minor off-label use specified in 3. Directions for Use in the jurisdictions listed in 4. States.
If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.
The persons listed in 1. Persons must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

THIS PERMIT IS IN FORCE FROM 9 MARCH 2001 TO 31 MARCH 2002.
It is in force until it expires or it is cancelled, suspended or surrendered.

REASON FOR ISSUE OF PERMIT
There is a need by irrigation farmers for a more effective herbicide for control of weeds in irrigation channels. An extension to use of the product Arsenal for this purpose could not be supported with the information available at this stage. An off-label permit, limiting use to channels where retention ponds are available, should limit the environmental hazard and allow collection of trial data and monitoring of commercial field use. An informed decision on whether this use should be continued or extended can then be made. This permit is a renewal of previously issued permit PER1862.

1. Persons
Persons generally.

2. Products
ARSENL HERBICIDE
Containing: 250 g/L IMAZAPYR as its only active constituent.

3. Directions for Use

<table>
<thead>
<tr>
<th>Situation</th>
<th>Pest</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRRIGATION</td>
<td>VARIOUS</td>
<td>Apply at a rate of 3 L/ha.</td>
</tr>
<tr>
<td>CHANNELS</td>
<td>WEEDS</td>
<td></td>
</tr>
</tbody>
</table>
- Supply channels and tail drains leading to recirculation dams only.

Critical Use Comments:
Follow the critical comments detailed in the Product Information Leaflet in Appendix 1.
Withholding Period:
NOT REQUIRED WHEN USED AS DIRECTED.

4. States
All States.
(Note: Victoria is not included in this permit because their 'control of use' legislation means that a permit is not required to legalise this off label use in Victoria.)

CONDITIONS OF PERMIT

General Conditions
THIS PERMIT provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit and the Product Information Leaflet in Appendix 1, the use of the product must be in accordance with instructions on its label.

PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit, particularly the information included in DETAILS OF PERMIT, CONDITIONS OF PERMIT and APPENDIX 1 (PRODUCT INFORMATION LEAFLET).

Permit Holder Only;

Environmental Trials and Monitoring
Field trials must be conducted to indicate the concentration levels reached in effluent from treated channels under the treatment regime proposed in this permit.
A suitable monitoring program must be provided to ensure concentrations of residues capable of causing toxicity to aquatic plants are not reaching natural riverine systems.
This permit is issued under the Agvet Code, of the relevant jurisdictions, to the person stated above. The holder of the permit must comply with all requirements as specified in the Agvet Code. A summary of the key requirements are that the holder must:

- supply any requested information to the NRA;
- inform the NRA if they become aware of any relevant information concerning the uses dealt with by this permit;
- comply with a lawful direction or requirement of an inspector.

This permit for the reasons given below, allows any person listed in 1. Persons to use the products listed in 2. Products for the minor off-label use specified in 3. Directions for Use in the jurisdictions listed in 4. States.

If this permit were not issued use of the products as specified in this permit would constitute an offence under the Agvet Codes.

The persons listed in 1. Persons must comply with all conditions listed in CONDITIONS OF PERMIT to be effectively covered by this permit.

This permit is in force from 13 September 2001 to 30 September 2006. It is in force until it expires or it is cancelled, suspended or surrendered.

### REASON FOR ISSUE OF PERMIT

Environmental weeds are causing large scale destruction of native ecosystems and this is likely to become worse as more introduced species establish and increase in density. The current registration of many herbicides precludes their use in many environmental weed situations. This permit allows the use of the listed herbicides in non-agricultural situations to control environmental weeds listed in attachment 1.

1. **Persons**
   Persons generally.

2. **Products**
   ARSENAL HERBICIDE
   Containing: 250 g/L IMAZAPYR present as ISOPROPYLAMINE SALT as its only active constituent.

### 3. Directions for Use

<table>
<thead>
<tr>
<th>Situation</th>
<th>Pest</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NON-AGRICULTURAL AREAS,</td>
<td>ENVIRONMENTAL BUSHLAND WEEDS</td>
<td>Apply in</td>
</tr>
<tr>
<td>&amp; FORESTS</td>
<td>&amp; WETLANDS ADJACENT AREAS</td>
<td>accordance</td>
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<td></td>
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<td>with those</td>
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<td>instructions</td>
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<td>as contained</td>
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<td></td>
<td>in attachment</td>
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<td></td>
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<td>1.</td>
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</tbody>
</table>

**Critical Use Comments:**
Apply strictly in accordance with application methods listed in attachment 1.

**Use of glyphosate formulations in aquatic situations:**
only those specific glyphosate products which have label approvals currently in place for aquatic use may be used in or near aquatic areas

4. **States**
   WA only.

### CONDITIONS OF PERMIT

Use in accordance with attachment 1.

This PERMIT provides for the use of a product in a manner other than specified on the approved label of the product. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label.

PERSONS who wish to prepare for use and/or use the products for the purposes specified in this permit must read, or have read to them, the permit particularly the information included in DETAILS OF PERMIT and CONDITIONS OF PERMIT.

In deciding whether or not to issue this permit the NRA must assess the use against many known and uncertain scientific and other factors. The NRA is satisfied that the approved use will not cause an undue hazard to human health and the environment. However, users should undertake the use knowing there is no guarantee that the use will be effective to the extent expected by users and that no crop damage may result.

### FOR A FULL COPY OF THIS PERMIT, PLEASE CONTACT BASF AUSTRALIA LTD ON 1800 501 940
Acknowledgments:
Collated by HerbiGuide. Phone 08 98444064 for more information.