Hussar®

SELECTIVE HERBICIDE

Active Constituent: 50 g/kg IODOSULFURON-METHYL SODIUM
Crop Safener: 150 g/kg MEFENPYR DIETHYL

GROUP B HERBICIDE

For the post-emergent control of annual ryegrass, wild oats, annual phalaris and certain broadleaf weeds in wheat as specified in the DIRECTIONS FOR USE table.

GENERAL INSTRUCTIONS
Hussar is a selective sulfonylurea herbicide. It is predominantly a foliar herbicide with less activity via the soil. Hussar will not reliably control weeds that emerge after spraying. Results are best under good growing conditions and application to weeds or crop under stress should be avoided.

Use of Surfactant / Wetting Agent
Hussar must always be applied with the addition of a surfactant such as a non-ionic wetting agent (e.g. BS1000® at 0.25% v/v) or Hasten® (at 1% v/v), even when tank mixing with other products.

Crop Safety
- Do not apply to any crop other than wheat.
- Wheat should be between the 3 leaf stage (Z13 growth stage), and the 5 tiller stage (Z25 growth stage) before application of Hussar.
- Do not apply Hussar if a previous application of a Group B herbicide has been made to the current crop.
- Some crop yellowing and growth retardation may occur within 5 weeks of application. Growth retardation will be increased if the crop is affected by root disease, (e.g. cereal cyst nematode, rhizoctonia, take-all (haydie)), nutritional stress, waterlogging, drought stress, excessively cold conditions or previous herbicide treatment.
- Application to very dry sandy soils followed by soaking rainfall may cause significant crop effects.
- Crop damage will be increased in highly alkaline soils (soil pH > 8.5 as determined by soil in water suspension).
- Do not apply to crops not actively growing due to cold and wet conditions or drought stress.
- Do not overlap when spraying or double spray corners.

Crop Rotation Recommendations
Minimum re-cropping intervals apply for all crops following Hussar application. The application of a Group B herbicide in the crop following Hussar use may result in increased crop effects. Consult the manufacturer of Hussar for advice in these situations.
Rainfall of less than 250 mm following Hussar use may result in extended re-cropping intervals for winter crops sown the following season. Patchy rain, with extended dry periods may also result in extended recropping intervals, even when rainfall exceeds 250 mm. If in doubt, seek specialist advice.
Rainfall of less than 500 mm following Hussar use may result in extended re-cropping intervals for summer crops sown in the following year.
Use on soils with a pH greater than 8.5 (soil in water) has not been extensively tested and is not recommended.
For advice on crops not listed below, contact the manufacturer, Bayer CropScience Pty. Ltd.
### Winter crops
- **wheat**: 1 day
- **barley**: 9 months
- **oats**: 9 months
- **triticale**: 9 months
- **faba beans**: 9 months
- **canola**: 9 months
- **chickpeas**: 9 months
- **lentils**: 21 months
- **lupins**: 9 months
- **lucerne, clover and subclover**: 9 months

In higher pH soils and at lower limit rainfall some discolouration may occur.

- **medic**: 21 months
- **peas**: 9 months
- **vetch**: 9 months

### Summer crops
- **cotton**: 12 months
- **mungbeans**: 12 months
- **sorghum**: 12 months
- **soybeans**: 12 months
- **sunflowers**: 12 months

### Resistant Weeds Warning
Hussar Selective Herbicide is a member of the sulfonylurea group of herbicides and has the inhibitor of acetylcoenzyme A synthase (ALS) mode of action. For weed resistance management Hussar is a Group B herbicide. Some naturally-occurring weed biotypes resistant to Hussar, and other Group B herbicides, may exist through normal genetic variability in any weed population. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by Hussar or other Group B herbicides.

Do not rely exclusively on Hussar for weed control. Use as part of an integrated weed management program involving herbicides with other modes of action and non-chemical methods of control. Avacare resistance management strategies are available from your local agricultural chemical supplier. Refer to these strategies for details of how to manage the build up of resistant weeds on your farm.

Since occurrence of resistant weeds is difficult to detect prior to use Bayer CropScience Pty. Ltd. accepts no liability for any losses that may result from the failure of Hussar to control resistant weeds.

### Mixing
Half fill the spray tank with water, then with agitators in motion, add the correct amount of Hussar directly into the spray tank. Add other relevant compatible herbicides, then wetting agent or crop oil as recommended. Complete filling the tank with agitators in motion. Agitation must continue before and during spraying.

### Application
Ensure that complete and even spray coverage of all weeds is achieved.

### Equipment
**Ground Sprayers** – Standard boom sprayers only are recommended and must be fitted with by-pass or mechanical agitation. It is recommended that 50 to 80 L water/ha is applied with a droplet size of 200 to 300 microns (application as a FINE/MEDIUM spray as defined by ASAE S572 Standard). The use of flat fan nozzles is recommended. Nozzles creating coarse or very coarse spray qualities have not been thoroughly investigated at this time and cannot be recommended.

Contact your Bayer CropScience representative for advice before applying this product through such nozzles.

**Aircraft** – Do not apply Hussar by aircraft.

### Sprayer Clean Up
The sprayer must be thoroughly decontaminated before being used again to spray crops. Ensure that the following operation is carried out in an area that is clear of waterways, desirable vegetation and tree roots, and preferably in an area where drainings can be contained.

1. Drain sprayer completely and wash out tank, boom and hoses with clean water.
2. Drain again.
3. Fill the tank with clean water and add 300 mL of chlorine bleach (containing 4% chlorine) per 100 L of water with agitation running.
4. Flush some bleach solution through booms and hoses and allow remainder to agitate in tank for 10 minutes.
5. Remove nozzles and filters and leave to soak in a bleach solution of 500 mL per 10 L of water while tank cleaning is in progress.
6. Briefly run the pump at periodic intervals to refresh chlorine solution in spray lines.
7. Drain tank and repeat the procedure of flushing with bleach solution.
8. Flush the tank, boom and hoses with clean water.
**Compatibility**

<table>
<thead>
<tr>
<th>Compatible products</th>
<th>Non-compatible products*</th>
<th>Contact Bayer CropScience for advice on use with Hussar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lontrel*</td>
<td>Mixing with zinc based foliar fertilisers may result in loss of efficacy</td>
<td>Insecticidal products other than chlorpyrifos</td>
</tr>
<tr>
<td>Starane®</td>
<td>Bromoxynil MCPA (e.g. Bromicide®, MA, Buctril® MA)</td>
<td></td>
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<tr>
<td></td>
<td>Tigrex®</td>
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<tr>
<td></td>
<td>LVE MCPA</td>
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<tr>
<td></td>
<td>Igran®</td>
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<tr>
<td></td>
<td>Other sulfonylurea herbicides</td>
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<tr>
<td></td>
<td>Chlorpyrifos-based formulations</td>
<td></td>
</tr>
</tbody>
</table>

* do not use in mixture with Hussar as decreased efficacy on weeds and/or adverse crop injury may occur

**RE-ENTRY PERIOD**

NIL

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**

Very toxic to aquatic plants and certain algae. DO NOT contaminate streams, rivers or waterways with this product or used containers.

**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.

**Undersown Clovers and Medics**

DO NOT apply to crops undersown with legumes.

**STORAGE AND DISPOSAL**

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 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**

Product will damage the eyes and will irritate the skin. Avoid contact with eyes and skin. If product in eyes, wash it out immediately with water. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, elbow-length PVC gloves and goggles. Wash hands after use. After each day’s use wash gloves, goggles and contaminated clothing.

**FIRST AID**

If poisoning occurs contact a doctor or Poisons Information Centre (telephone 13 11 26).

**MATERIAL SAFETY DATA SHEET**

Additional information is listed in the Material Safety Data Sheet, which can be obtained from www.bayercropscience.com.au.

**EXCLUSION OF LIABILITY**

This product must be used strictly as directed, and in accordance with all instructions appearing on the label and in other reference material. So far as it is lawfully able to do so, Bayer CropScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions.

APVMA Approval No.: 52171/0906

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FOR 24 HOUR SPECIALIST ADVICE IN EMERGENCY ONLY
PHONE 1800 033 111
DIRECTIONS FOR USE

Restraints

DO NOT use if rainfall or irrigation is to occur within 8 hours of application.

DO NOT apply to crops undersown with legumes.

DO NOT apply to wheat before the 3-leaf stage (Z13).

DO NOT apply to wheat that is physically damaged (e.g. by hail, wind, insect attack).

DO NOT apply without surfactant/wetting agent#.

DO NOT apply to paddocks where there is a high risk of weeds resistant to Group B herbicides.

DO NOT make more than one application of a Group B herbicide per season

# See 'Use of Surfactant/Wetting Agent' under 'General Instructions'.

Note

Hussar is a sulfonylurea herbicide. Hussar will substantially reduce the growth of many weeds rather than give complete plant kill. Refer to the critical comments in the Directions for Use Table below, for directions on specific weeds.

<table>
<thead>
<tr>
<th>CROP</th>
<th>WEED</th>
<th>STATE</th>
<th>WEED STAGE</th>
<th>RATE g/ha</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass Weeds</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Wheat ≥ 3 leaf (Z13) and ≤ 5 tillers (Z25)</td>
<td>Annual ryegrass (Lolium rigidum)</td>
<td>NSW, ACT, Vic, SA, WA only</td>
<td>1 to 3 leaf (Z11 to Z13)</td>
<td>150 g</td>
<td>Apply generally within 4 to 7 weeks after sowing, but only to wheat with at least 3 leaves (Z13) and not more than 5 tillers (Z25). Do not use for control of dense ryegrass populations (&gt;300 plants/m²). Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Early tillering (Z13, Z11 to Z13, 22)</td>
<td>200 g</td>
<td></td>
</tr>
<tr>
<td>Wild oats (Avena spp.)</td>
<td></td>
<td>All States</td>
<td>1 to 3 leaf (Z11 to Z13)</td>
<td>200 g</td>
<td>Apply generally within 4 to 7 weeks after sowing, but only to wheat with at least 3 leaves (Z13) and not more than 5 tillers (Z25). Do not use for control of dense wild oat populations (&gt;150 plants/m²).</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td><strong>Suppression of wild oats.</strong> Will substantially reduce the growth of wild oats and their ability to compete with the crop and will reduce seed set of wild oats but may not give a significant reduction in plant numbers. Critical comments above for wild oat control (200 g/ha rate) also apply.</td>
</tr>
<tr>
<td></td>
<td>Annual phalaris, paradoxa grass (Phalaris paradoxa only)</td>
<td>All States</td>
<td>1 to 3 leaf (Z11 to Z13)</td>
<td>200 g</td>
<td>Apply generally within 4 to 7 weeks after sowing, but only to wheat with at least 3 leaves (Z13) and not more than 5 tillers (Z25). Do not use for control of dense phalaris populations (&gt;300 plants/m²). <strong>Other phalaris species may not be adequately controlled with Hussar.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Suppression of phalaris.</strong> Will substantially reduce the growth of phalaris and its ability to compete with the crop and will reduce seed set of phalaris but may not give a significant reduction in plant numbers. Critical comments above for phalaris control (200 g/ha rate) also apply.</td>
</tr>
</tbody>
</table>

Bayer CropScience
### CROP

<table>
<thead>
<tr>
<th>WEED</th>
<th>STATE</th>
<th>WEED STAGE</th>
<th>RATE g/ha</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
</table>

#### Broadleaf weeds

**WEEDS CONTROLLED**

<table>
<thead>
<tr>
<th>Weed</th>
<th>CROP</th>
<th>STATE</th>
<th>WEED STAGE</th>
<th>RATE g/ha</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>&gt; 3 leaf (Z13) and ≤ 5 tillers (Z25)</td>
<td>Charlock (Sinapis arvensis)</td>
<td>cotyledon to 8 leaf</td>
<td>150 g</td>
<td>Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clover (Trifolium spp.)</td>
<td>cotyledon to 6 leaf</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deadnettle (Lamium amplexicaule)</td>
<td>cotyledon to 4 leaf</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doublegee, spiny emex, three corner jack (Emex australis)</td>
<td>cotyledon to 4 leaf</td>
<td>200 g</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fumitory, denseflower (Fumaria densiflora), Fumitory, wall (Fumaria muralis)</td>
<td>cotyledon to 4 leaf</td>
<td>150 g</td>
<td>Not all fumitory species are adequately controlled with Hussar. Ensure species identification is correct before applying Hussar.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indian hedge mustard (Stylosanthes orientale)</td>
<td>2 to 6 leaf</td>
<td>-</td>
<td>Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lupins (volunteer) (Lupinus angustifolius)</td>
<td>cotyledon to 4 leaf</td>
<td>-</td>
<td>Lupins that emerge after application will not be controlled.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medic (Medicago spp.)</td>
<td>cotyledon to 4 leaf</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paterson’s curse, Riverina bluebell, Salvation Jane (Echium plantagineum)</td>
<td>2 to 6 leaf</td>
<td>200 g</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shepherd’s purse (Capsella bursa-pastoris)</td>
<td>2 to 8 leaf</td>
<td>150 g</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tumip weed (Rapistrum rugosum)</td>
<td>cotyledon to 6 leaf</td>
<td>-</td>
<td>Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wild radish (Raphanus raphanistrum)</td>
<td>cotyledon to 4 leaf</td>
<td>200 g</td>
<td>Heavy populations (&gt;50 plants/m²) or those suffering moisture stress may not be adequately controlled. A follow-up application of a suitable herbicide may be required to control remaining plants or plants that emerge after application. Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wire weed, hogweed (Polygonum aviculare), tree hogweed (Polygonum patulum)</td>
<td>cotyledon to 4 leaf</td>
<td>150 g</td>
<td>-</td>
</tr>
</tbody>
</table>

**WEEDS SUPPRESSED**

<table>
<thead>
<tr>
<th>Weed</th>
<th>CROP</th>
<th>STATE</th>
<th>WEED STAGE</th>
<th>RATE g/ha</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>&gt; 3 leaf (Z13) and ≤ 5 tillers (Z25)</td>
<td>Bedstraw (Galium tricornutum)</td>
<td>cotyledon to 4 whorls</td>
<td>200 g</td>
<td>Suppression only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black bindweed (Fallopia convolvulus)</td>
<td>2 to 6 leaf</td>
<td>150 g</td>
<td>Suppression only. Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peas (volunteer) (Pisum sativum)</td>
<td>3 to 4 node</td>
<td>-</td>
<td>Suppression only. Peas that emerge after application will not be controlled.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sheepweed, white ironweed, corn gromwell (Buglossoides arvense)</td>
<td>cotyledon to 4 leaf</td>
<td>-</td>
<td>Suppression only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sowthistle (Sonchus oleraceus)</td>
<td>2 to 4 leaf</td>
<td>200 g</td>
<td>Suppression only. Remaining plants will be stunted and chlorotic after treatment. Will not control weeds resistant to Group B herbicides.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stonecrop (Crassula sieberana)</td>
<td>2 to 4 leaf</td>
<td>150 g</td>
<td>Suppression only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tares, wild vetch (Vicia sativa)</td>
<td>2 to 4 leaf</td>
<td>-</td>
<td>Suppression only.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toadrush (Juncus bufonius)</td>
<td>up to 2 leaf</td>
<td>-</td>
<td>Suppression only.</td>
</tr>
</tbody>
</table>

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIODS

Harvest: NOT REQUIRED WHEN USED AS DIRECTED
Grazing/Stockfood:  DO NOT GRAZE OR CUT FOR STOCKFOOD FOR 4 WEEKS AFTER APPLICATION