Use: A residual herbicide for the control of a range of broad-leaved and grass weeds in winter oilseed rape.

Formulation: An emulsifiable concentrate, containing 200 g/l metazachlor and 200 g/l dimethenamid-p.

Pack Size: 10 litres in outers of two.

LERAP: Category B (See Appendix 12 for further information).

Recommended Crop: Winter oilseed rape

Maximum Individual Dose: 2.5 litres product per hectare.

Maximum Total Dose: 2.5 litres product per hectare.

Water Volume: 220 litres of water per hectare

Spray Quality: MEDIUM

Latest Time of Application: Before 7th true leaf stage (GS 17).

Aerial Application: No

Compatibility: For details of compatibilities contact your distributor, local BASF representative, the BASF Technical Services Hotline: 0845 602 2553 or visit our website on: www.agriCentre.basf.co.uk

Major changes since last printing: Restriction of metazachlor - a maximum total dose of 1000g metazachlor/hectare may only be applied every third year on the same field.

This product label is compliant with the CPA Voluntary Initiative Guidance
DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Springbok/Muntjac is a residual herbicide that can be used on all varieties of winter oilseed rape for the control of a range of broad-leaved and grass weeds.

1. RESTRICTIONS/WARNINGS

When Springbok/Muntjac is applied pre-emergence, it is important for crop safety to ensure physical separation of the herbicide from the seed. Ensure that the seed is well covered with soil to a depth of 15 mm. With direct-drilled crops, harrow across the slits to cover the seed before spraying.

DO NOT disturb the soil after application.

DO NOT apply to broadcast crops until the crop has attained the two fully expanded cotyledon growth stage.

DO NOT use Springbok/Muntjac on sands, very light soils or soils containing more than 10% organic matter.

DO NOT apply to stony soils; i.e. stones, flints or chalk readily visible on surface. On brashy and stony soils, Springbok/Muntjac may cause some reduction in crop vigour and/or plant stand.

DO NOT apply to cloddy seedbeds. Seedbeds must have a fine, firm tilth for optimum weed control. Loose or cloddy seedbeds must be consolidated prior to application.

DO NOT apply when heavy rain is forecast and DO NOT use on waterlogged soil or soils prone to waterlogging. Crop thinning or reductions in crop vigour can occur if there is very wet weather after application.

Soil moisture is required for effective weed control via root uptake. Residual control may be reduced under prolonged dry conditions.

Weeds germinating from depth may not be controlled.

DO NOT apply Springbok/Muntjac to crops suffering from stress, which may be caused, for example, by pests, disease, waterlogging, poor seedbed conditions or previous chemical treatment.

Under frosty conditions a transient scorch may occur.

Avoid spray drift on to neighbouring crops and plants outside the target area.
2. **WEED CONTROL**

Springbok/Muntjac is taken up via cotyledons and roots and takes maximum effect before, or shortly after, weed emergence. Optimum results are obtained from applications made to fine, firm and moist seedbeds.

2.1 **Susceptibility of weeds to single applications of Springbok/Muntjac.**

<table>
<thead>
<tr>
<th>Weed species</th>
<th>Application pre-emergence of weed.</th>
<th>Application post-emergence of weed.</th>
<th>Weed susceptibility rating</th>
<th>Maximum susceptible growth stage of weed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-grass</td>
<td>MR</td>
<td>Pre-em</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Chickweed, Common</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Cleavers</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Crane’s-bill, Cut-leaved</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Crane’s-bill, Round-leaved</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Crane’s-bill, Small-flowered</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Forget-me-not, Field</td>
<td>MS</td>
<td>Pre-em</td>
<td>MS</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Mayweed, Scented</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Pansy, Field</td>
<td>MR</td>
<td>Pre-em</td>
<td>MR</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Poppy, Common</td>
<td>S</td>
<td>Pre-em</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Shepherd’s-purse</td>
<td>S</td>
<td>1 true leaf (MS)</td>
<td>S</td>
<td>1 true leaf</td>
</tr>
</tbody>
</table>

S = Susceptible
MS = Moderately Susceptible
MR = Moderately Resistant
R = Resistant
Pre-em = Pre-emergence of weed

2.2 **Resistance management**

Strains of some annual grasses (e.g. black-grass, wild-oats, and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. Guidelines have been produced by the Weed Resistance Action Group (WRAG) and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

Repeated use of herbicides with the same mode of action can increase the risk of strains of weeds developing resistance to these compounds, leading to poor control. In order to minimise the risk, a strategy for preventing and managing such resistance should be adopted. Use products with different modes of action and from different chemical groups in sequence or tank-mix, in conjunction with effective cropping rotation and cultivation techniques. In all cases the recommended rate of use should be adhered to. Follow WRAG guidelines.
3. **CROPS**

Springbok/Muntjac can be used on all varieties of winter oilseed rape.

3.1 **Time of application**

Springbok/Muntjac may be applied pre- or post-emergence of the crop but for optimum activity application must be pre-emergence of the weeds. Extreme care must be taken to avoid spray drift onto non-crop plants outside the target area.

3.1.1 Pre-crop emergence

Applications should only be made on medium and heavy soils (as defined by the ADAS Soil Texture (85) System). Pre-emergence applications should be made before the crop seed chits, which in optimum conditions may occur within 48 hours of drilling.

**DO NOT** use Springbok/Muntjac pre-crop emergence when any of the following conditions apply:

- When crop has been broadcast.
- The crop seed has started to germinate (i.e. 48 hours after drilling)
- Seed is not covered with 15 mm of soil;
- When heavy rain is forecast;
- Dry, cloddy or open seedbeds;
- Late drilled crops – as a guide these are crops drilled later than the first week in September in Northern England and Scotland and later than mid-September in the rest of the UK;
- Stony soils, i.e. stones, flints or chalk are readily visible on the soil surface.

3.1.2 Post-crop emergence

Applications can be made in the following circumstances:

- When the majority of the crop has two fully expanded cotyledons and up to the sixth true leaf growth stage (GS 16);
- On light, medium and heavy soils (as defined by the ADAS Soil Texture (85) System);
- When seedbed conditions are not ideal for pre-emergence use;
- When the seed is not covered with 15 mm of soil (as with broadcast crops);
- To light, stony, brashy or gravelly soils, particularly if heavy rainfall was forecast for the period following drilling;
- When late-drilled crops are to be treated.

3.2 **Rate of application**

Apply 2.5 litres/hectare Springbok/Muntjac in 220 litres of water per hectare.

4. **FOLLOWING CROPS**

Any crop can follow normally harvested winter oilseed rape treated with Springbok/Muntjac. Ploughing is not essential before sowing a following cereal crop, but is required for all other crops.

In the event of crop failure, the following crops may be sown after ploughing to a depth of at least 15 cm:

- **Redrilling the same autumn:** winter wheat (excluding durum) or winter barley
- **Redrilling the following spring:** cereals (excluding durum wheat), spring oilseed rape, peas and field beans.
5. **MIXING AND SPRAYING**

5.1 **Application**

Apply as a MEDIUM spray, as defined by BCPC.
Springbok/Muntjac should be applied in 220 litres of water per hectare.

5.2 **Mixing**

Never prepare more spray solution than is required.
Fill the spray tank three quarters full with water and start the agitation. To ensure thorough mixing of the product, invert the container several times before opening. Add the required quantity of Springbok/Muntjac to the spray tank while re-circulating. Fill up the tank with water and continue agitation until spraying is completed.

On emptying the product container, rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of container safely.

5.3 **Sprayer cleaning**

Wash equipment thoroughly immediately after use.
Fill the tank with clean water and leave overnight.
Spray out before storage or using other products.
Traces of the product may cause damage to susceptible crops sprayed later.

6. **CONTAINER AND STORAGE**

Springbok/Muntjac is supplied in 10 litre containers.
Store in a suitable pesticide store, keep dry and protect from frost.
7. SAFETY PRECAUTIONS

Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS before meals and after work.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

IF YOU FEEL UNWELL seek medical advice (show the label if possible).

Environmental protection

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5m of the top of the bank of a static or flowing waterbody, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m of the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD’s published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for inspection for three years.

Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

DO NOT RE-USE CONTAINER for any purpose.

STORE IN ORIGINAL CONTAINER tightly closed, in a safe place.

On emptying the container, RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of container safely.
8. DPD REGULATIONS (CHIP 3)

**Springbok® / Muntjac®**

An emulsifiable concentrate containing 200 g/l metazachlor and 200 g/l dimethenamid-p

- **HARMFUL IF SWALLOWED**
  - IRRITATING TO SKIN AND EYES
  - MAY CAUSE SENSITISATION BY SKIN CONTACT
  - VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

- **KEEP OUT OF REACH OF CHILDREN**
  - KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS
  - WHEN USING DO NOT EAT, DRINK OR SMOKE
  - AVOID CONTACT WITH SKIN
  - THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY
  - WEAR SUITABLE GLOVES
  - IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY
  - AND SHOW THIS CONTAINER OR LABEL
  - USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION

To avoid risks to man and the environment, comply with the instructions for use

This product is approved under the Control of Pesticides Regulations 1986.

9. IMPORTANT INFORMATION

**IMPORTANT INFORMATION**

**FOR USE ONLY AS AN AGRICULTURAL HERBICIDE**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum individual dose (litres product/hectare)</th>
<th>Maximum total dose (litres product/hectare)</th>
<th>Latest time of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter oilseed rape</td>
<td>2.5 litres product / ha</td>
<td>2.5 litres product / ha</td>
<td>Before 7th true leaf stage (GS 17)</td>
</tr>
</tbody>
</table>

**Other specific restrictions:**

A maximum total dose of 1000g metazachlor/hectare may only be applied every third year on the same field.

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

(Springbok MAPP No. 12983
Muntjac MAPP No. 14540)