LEOPARD® 5EC

MAPP 16915

For control of annual and perennial grasses in sugar beet, fodder beet, red beet, mangels, oilseed rape, field beans, vining and combining peas, potatoes and linseed.

An emulsifiable concentrate formulation containing 50 g/L quizalofop-p-ethyl. Also contains solvent naphtha (petroleum), heavy aromatic (Solvesso).

Danger
May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking. Keep out of reach of children. Avoid breathing vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.
**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 CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES** when handling the contaminated surfaces.
- **WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS)** when applying by vehicle-mounted or trailed equipment.

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

- **TAKE OFF IMMEDIATELY all contaminated clothing.**
- **WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.**
- **WASH HANDS AND EXPOSED SKIN** before eating and drinking and after work. If you feel unwell, seek medical advice immediately (show the label where possible).
- **IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY with plenty of water and seek medical advice.**
- **WASH ANY CONTAMINATION from skin immediately.**

**Environmental Protection**

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

**Storage and Disposal**

- **KEEP IN ORIGINAL CONTAINER**, tightly closed, in a safe place.
- **WASH OUT CONTAINER THOROUGHLY**, empty washings into spray tank and dispose of safely.
- **DO NOT RE-USE CONTAINER FOR ANY PURPOSE.**

### IMPORTANT INFORMATION

**FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE**

<table>
<thead>
<tr>
<th>Crops</th>
<th>Maximum individual dose (L product/ha)</th>
<th>Maximum number of applications</th>
<th>Latest timing of application</th>
</tr>
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<tbody>
<tr>
<td>Oilseed rape</td>
<td>1.25</td>
<td>One per crop</td>
<td>15 weeks before harvest</td>
</tr>
<tr>
<td>Sugar beet, fodder beet, red beet and mangels</td>
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**Other specific restrictions:**

To avoid the build up of resistance do not apply products containing an ACCase inhibitor herbicide more than twice to any crop. In addition, do not use this product in mixture or in sequence with any other product containing quizalofop-p-ethyl or quizalofop-p-tefuryl. Do not apply by hand held sprayers.

**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.**
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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.

RESTRICTIONS OR WARNINGS
DO NOT apply when crop is under stress, such as in frosty weather or when frost is expected, insect attack, manganese deficiency, wind damage or where there is possible check from earlier pesticide treatments.
DO NOT hoe beet crops within 21 days of application as weed control may be reduced.
A period of at least twelve hours without rain should follow spraying otherwise weed control may be reduced.
CONSULT PROCESSORS BEFORE USING ON CROPS RECOMMENDED FOR PROCESSING.
AVOID DRIFT onto neighbouring crops, especially cereal crops.
In some situations LEOPARD® 5EC may cause yellowing of the foliage of pea crops. This is usually outgrown quickly.
Extreme care must be taken to avoid spray drift on to non-crop plants outside of the target area.
Crops should not be re-entered until spray residues are dry.

RESISTANCE
Strains of some annual grasses e.g. blackgrass, wild oats and Italian ryegrass have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing herbicide resistant grass weeds should be adopted. Guidelines have been produced by the Weed Resistance Action Group. Copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.
This product contains quizalofop-p-ethyl which is an ACCase inhibitor, also classified by the Herbicide Resistance Action Committee as ‘Group A’.

- To reduce the risk of developing resistance, applications should be made to young, actively growing weeds. Use only as part of a resistance management strategy that includes:
- Use crop rotation and other cultural control measures to prevent and manage herbicide resistant grass weeds;
- Use of tank/product mixes or sequences of herbicides with different modes of action within individual crops, or successive crops;
- Use of grass weed herbicides with different modes of action throughout the cropping rotation;
- Monitoring of weed control effectiveness and investigation of any odd patches of poor grass weed control. If unexplained, contact your agronomist who may consider a resistance test appropriate;
- Do not use LEOPARD 5EC or any other ACCase inhibitor as the sole means of grass weed control in successive crops. Always follow WRAG guidelines for preventing and managing herbicide resistant grass weeds.

WEEDS CONTROLLED
For best results apply when weeds are actively growing. Weed foliage should be dry, but soil conditions damp to aid translocation up the weed. Weeds emerging after application will not be controlled.
Annual Grasses and Volunteer Cereals
Apply from when the weeds have 2 leaves to fully tillered stage.
Brome, sterile
Italian ryegrass
Perennial ryegrass (only controlled when grown from seed)
Volunteer cereals
Wild oats
LEOPARD 5 EC can contribute to the control of blackgrass as part of a herbicide resistance management strategy, involving mixtures and sequences with herbicides of alternative modes of action. Where resistant biotypes are present, control from LEOPARD 5 EC will be unacceptable.
Perennial Grasses
Apply from when the weeds have 4-6 leaves to first node detectable stage.
Common couch
The effects of LEOPARD 5EC on long term control of perennial weeds (i.e. in succeeding crops) has not been fully investigated
The table below shows the rates of use required in each crop to control the weeds listed above.

<table>
<thead>
<tr>
<th>Crop Description</th>
<th>Oilseed rape</th>
<th>All other crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barren brome, volunteer cereals, wild oats (up to 2 tillers)</td>
<td>0.75 L/ha(^3)</td>
<td>-</td>
</tr>
<tr>
<td>Annual grasses and volunteer cereals (up to fully tillered)</td>
<td>1.25 L/ha</td>
<td>1.25 L/ha</td>
</tr>
<tr>
<td>Common couch</td>
<td>1.25 L/ha(^1)</td>
<td>2.5 L/ha(^2)</td>
</tr>
</tbody>
</table>

\(^1\) Common couch is only moderately susceptible to 1.25 L/ha dose

\(^2\) In severe infestations of common couch, a follow-up treatment with a different herbicide may be required if fresh growth occurs

\(^3\) Winter oilseed rape only

**CROP SPECIFIC INFORMATION**

All varieties of beet crops, oilseed rape, potatoes, linseed, field beans and peas may be safely treated.

<table>
<thead>
<tr>
<th>Crop Description</th>
<th>Maximum dose (litres product/ha)</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar beet, fodder beet, red beet and mangels</td>
<td>2.5</td>
<td>Apply from when crop has 2 expanded leaves. Do not spray after the end of July.</td>
</tr>
<tr>
<td>Oilseed rape</td>
<td>1.25</td>
<td>Apply from the expanded cotyledon stage and before the crop covers the larger weeds.</td>
</tr>
<tr>
<td>Peas and beans, linseed</td>
<td>2.5</td>
<td>Apply when weeds are at their correct stage of growth and before the crop covers them.</td>
</tr>
<tr>
<td>Potatoes</td>
<td>2.5</td>
<td>Apply from 4 leaf stage of crop and before the crop covers the weeds.</td>
</tr>
</tbody>
</table>

If application is made in sequence with other herbicides the following application intervals must be noted; Beet crops; 3 days, Oilseed rape; 14 days; Others 21 days.

**FOLLOWING CROPS**

**CROP FAILURE:** If a crop fails for any reason, only re-drill with the following crops, observing the interval specified between application and re-drilling.

<table>
<thead>
<tr>
<th>Following crop</th>
<th>Rate of Use</th>
<th>Minimum interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peas, field beans, oilseed rape and other broad-leaved crops*</td>
<td>Up to 2.5 L/ha</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Winter wheat, winter barley</td>
<td>Up to 1.25 L/ha</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Winter oats</td>
<td>Up to 2.5 L/ha</td>
<td>6 weeks</td>
</tr>
</tbody>
</table>

*Onions, leeks and maize: do not drill as a following crop in a crop failure situation.
MIXING AND SPRAYING
LEOPARD 5EC should be applied as a FINE or MEDIUM spray (as defined by BCPC) in 200-300 litres water per hectare.

Use the higher rate where crop and/or weed is dense and wild oats are present. It is essential to get good coverage of the weeds to get good control.

Ensure the sprayer is clean and in good working order. Calibrate according to sprayer manufacturers’ recommendations.

Half-fill the spray tank with clean water and add the required quantity of LEOPARD 5EC. Add the remainder of the water and continue agitation until spraying is complete.

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.

Wash out the sprayer thoroughly after use by rinsing three times with water.

DISCLAIMER/CONDITIONS OF SUPPLY
The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products.

We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.