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

**Formulation:** A suspension concentrate containing 100 g/l (8.7% w/w) quinmerac and 400 g/litre (34.8% w/w) metazachlor.

**Pack size:** Novall 10 litres in outers of two. Boomerang 5 litres in outers of four.

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

**Recommended Crops:** Winter oilseed rape.

**Recommended Rate:** 2.5 litres per hectare.

**Water Volume:** 220 litres per hectare.

**Spray Quality:** MEDIUM

**Latest Recommended Time of Application:** End of January in the year of harvest.

**Processed Crops:** Consult processors before use.

**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.

Novall/Boomerang is a residual herbicide that can be used on all varieties of winter-sown oilseed rape for the control of cleavers and a range of other broad-leaved and grass weeds.

1. RESTRICTIONS/WARNINGS

When Novall/Boomerang is applied pre-emergence, it is important for crop safety to ensure physical separation of the herbicide from the seed. This is achieved by ensuring 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.

Loose or puffy seedbeds must be consolidated before treatment.

Seedbeds should be moist, firm and free from clods.

Novall/Boomerang is suitable for use on all soil types as defined by Soil Texture (85) System, except sands and very light soils and soils containing more than 10% organic matter.

On brashy and stony soils, Novall/Boomerang may cause some reduction in crop vigour and/or plant stand, due to the chemical moving down to the root zone too quickly.

**DO NOT** apply Novall/Boomerang to soils with a compaction layer or to poorly drained soils, since damage can occur under waterlogged conditions.

If Novall/Boomerang is applied onto a dry soil surface it will only be effective after rain has occurred.

To reduce the risk of movement of Novall/Boomerang to water:

a. On clay soils, create a fine, consolidated seedbed to slow the downward movement of water.

b. **DO NOT** apply Novall/Boomerang to dry soil. Moist soils have fewer and smaller cracks.

c. **DO NOT** apply Novall/Boomerang if heavy rain is forecast, wait until after the event.

A reduction in crop vigour, weed control and possibly plant stand may occur if excessive rain falls shortly after application, particularly on the lighter soils.

Where a crop check has occurred, this normally grows out after a few weeks and yields are normally unaffected.

**DO NOT** use on broadcast crops.

**DO NOT** overlap spray swaths, particularly on headlands.

**DO NOT** treat crops which are suffering from wilting, pests or diseases.

Under frosty conditions a transient scorch may occur.

Avoid spray drift onto neighbouring crops.

Consult processors before use.
2. **WEED CONTROL**

Herbicidal activity is dependent upon root uptake.

2.1 **Susceptibility of weeds to single applications of Novall/Boomerang**

<table>
<thead>
<tr>
<th>Weed Name</th>
<th>Pre-emergence category</th>
<th>Maximum susceptible stage post-emergence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-grass</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Chickweed, Common</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Cleavers</td>
<td>S</td>
<td>2 whorls</td>
</tr>
<tr>
<td>Cranesbill, Cut-leaved</td>
<td>MR</td>
<td>–</td>
</tr>
<tr>
<td>Dead-nettle, Red</td>
<td>S</td>
<td>Cotyledon MS</td>
</tr>
<tr>
<td>Forget-me-not, Field</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Fumitory, Common</td>
<td>MS</td>
<td>–</td>
</tr>
<tr>
<td>Groundsel</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Knotgrass</td>
<td>R</td>
<td>–</td>
</tr>
<tr>
<td>Mayweed spp.</td>
<td>S</td>
<td>4 lvs</td>
</tr>
<tr>
<td>Meadowgrass, Annual</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Pansy, Field</td>
<td>MS</td>
<td>–</td>
</tr>
<tr>
<td>Parsley, Fool's</td>
<td>S</td>
<td>–</td>
</tr>
<tr>
<td>Parsley Piert</td>
<td>S</td>
<td>Pre-em</td>
</tr>
<tr>
<td>Penny-cress, Field</td>
<td>R</td>
<td>–</td>
</tr>
<tr>
<td>Poppy, Common</td>
<td>S</td>
<td>2 lvs</td>
</tr>
<tr>
<td>Shepherd’s-purse</td>
<td>S</td>
<td>Cotyledon</td>
</tr>
<tr>
<td>Sowthistle, Perennial*</td>
<td>S</td>
<td>Cotyledon - 1 leaf</td>
</tr>
<tr>
<td>Speedwell, Common field</td>
<td>S</td>
<td>2 lvs</td>
</tr>
</tbody>
</table>

S = Susceptible.  
Pre-em = Pre-emergence of weed.  
MS = Moderately Susceptible.  
MR = Moderately Resistant.  
R = Resistant.  
– = No information.  
* Only plants from seed of this species are controlled.

2.2 **Resistance**

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 and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

3. **CROPS**

Novall/Boomerang can be used on all varieties of winter-sown oilseed rape.

Novall/Boomerang may be applied pre- or post-emergence of the crop but for maximum activity application must be pre-emergence of the weeds.

Pre-crop emergence applications should be made on medium and heavy soils only (as defined by the ADAS Soil Texture [85] system). Application should be made before the crop seed chits, which in warm moist soils may occur within 48 hours of drilling. Seedbeds should be moist, firm and free from clods, but also see Restrictions/Warnings section. DO NOT USE ON BROADCAST CROPS.
DO NOT USE NOVALL/BOOMERANG pre-crop emergence when any of the following conditions apply:
- When heavy rain is forecast.
- Dry cold bedseed beds.
- 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, readily visible on the soil surface.

Post-crop emergence applications can be made on light, medium and heavy soils (as defined by the ADAS Soil Texture system). Application can be made from when the majority of the crop has two fully expanded cotyledons until before the end of January. The soil should be moist at application, or rainfall must occur shortly after application, but also see Restrictions/Warnings section.

Post-emergence application of Novall/Boomerang is recommended if:
- Seedbed conditions are not ideal for pre-emergence use.
- The seed is not covered with 15 mm of soil (as with broadcast crops).
- Novall/Boomerang could not be applied before the seed chits.
- Light soils, or all recommended soils which are stony, brashy or gravelly, are to be treated particularly if heavy rainfall has been forecast for the period following drilling.
- Late drilled crops are to be treated.

4. FOLLOWING CROPS
Any crop can follow normally harvested winter oilseed rape treated with Novall/Boomerang. Ploughing is not essential before sowing a following cereal crop, but is required for other crops.

In the event of crop failure in the autumn or winter, then only the crops listed below can be drilled after the use of Novall/Boomerang:
- Re-drilling the following spring — spring barley and potatoes may be sown after ploughing.

5. MIXING AND SPRAYING
Apply 2.5 litres/hectare Novall/Boomerang.

Apply as a MEDIUM spray, as defined by BCPC.

Novall/Boomerang should be applied in 220 litres/hectare.

DO NOT use filters finer than 50 mesh.

SHAKE WELL BEFORE USE.

Half fill the spray tank with clean water and start the agitation.

Pour in the required amount of Novall/Boomerang.

Add the remainder of the water and continue agitation until spraying is completed.

Rinse empty containers thoroughly and add rinsings to the spray tank.

DO NOT overlap spray swaths, particularly on headlands.

Avoid spray drift onto neighbouring crops.

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
Novall is supplied in 10 litre and Boomerang in 5 litre polyethylene containers and should be kept dry and frostproof in a suitable pesticide store.
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.

TAKE OFF IMMEDIATELY all contaminated clothing.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH CONCENTRATE from skin or eyes immediately.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

**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 5 m 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 1 m 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.

KEEP LIVESTOCK out of treated areas until poisonous weeds such as ragwort have died and become unpalatable.

**Storage and disposal**

Keep dry and frostproof in a suitable pesticide store.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

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 safely.
8. **DPD REGULATIONS (CHIP 3)**

**Novall®/Boomerang®**

A suspension concentrate containing 100 g/l quinmerac and 400 g/litre metazachlor.

**MAY CAUSE SENSITISATION BY SKIN CONTACT.**

**VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.**

**IRRITANT**

WEAR SUITABLE PROTECTIVE CLOTHING.

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.

**DO NOT** BREATHE SPRAY.

**THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY.**

**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, as directed below:**

**CROPS:** Winter oilseed rape.

**MAXIMUM TOTAL DOSE:** 2.5 l/ha.

**LATEST TIMING:** End of January in the year of harvest.

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.**

(Novall: MAPP No. 12031. Boomerang: MAPP No. 14043)