

# HEROLD®

MAPP 16195

SHAKE WELL BEFORE USE

A contact and residual herbicide for pre- and post-crop emergence use against a range of broad-leaved weeds and annual meadowgrass in winter wheat and winter barley. A suspension concentrate formulation containing 400 g/L (32.2% w/w) flufenacet and 200 g/L (16.1% w/w) diflufenican.

Batch No: see packaging

To access the Safety Data Sheet for this product scan the QR code or use the weblink:  
<http://goo.gl/mZ0ewA>



Alternatively, contact your supplier



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## Warning

**Harmful if swallowed.  
May cause an allergic skin reaction.  
May cause damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life with long lasting effects.**

Wear protective gloves/protective clothing. If exposed or if you feel unwell: call a poison centre or doctor/physician. 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.**

**Marketed by:** Adama Agricultural Solutions UK Ltd  
Third Floor East, 1410 Arlington Business Park, Theale, Reading RG7 4SA  
Telephone: (01635) 860555 | Technical Helpline: (01635) 876622  
**Authorisation holder:** Bayer CropScience Limited  
230 Cambridge Science Park, Milton Road, Cambridge CB4 0WB

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**HEROLD®**

**MAPP 16195**

**A contact and residual herbicide for pre- and post-crop emergence use against a range of broad-leaved weeds and annual meadowgrass in winter wheat and winter barley.**

A suspension concentrate formulation containing 400 g/L (32.2% w/w) flufenacet and 200 g/L (16.1% w/w) diflufenican.

**THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK.**

## **IMPORTANT INFORMATION**

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

**Crops:** Winter wheat and winter barley.

**Maximum individual dose**

**Maximum total dose**

**Maximum no. of applications**

**Latest time of application**

**Other specific restrictions**

Full details are given in the information box within this leaflet.

**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.**



**For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333**

## **SAFETY PRECAUTIONS**

### **Operator Protection**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following: WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate or applying the product.

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.

**WHEN USING DO NOT EAT, DRINK OR SMOKE.**

**IF YOU FEEL UNWELL,** seek medical advice immediately (show the label where possible).

### **SAFETY PRECAUTIONS**

**(including buffer zone information) continue within the leaflet attached →**

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**To avoid risks to human health and the environment, comply with the instructions for use.**

## IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE

**Crops:** Winter wheat and winter barley

**Maximum individual dose:** 0.3 L product/ha

**Maximum total dose:** 0.6 L product/ha

**Maximum no. of applications:** 2

**Latest time of application:** Before 31st March in the year of harvest and

Winter wheat: Before third tiller stage (GS 23)

Winter barley: Before fourth tiller stage (GS 24)

**Other specific restrictions:** Where the second application of a sequence is made after 31st December, the first application must be made before GS 13 of the crop.

A minimum interval of 6 weeks must be observed between applications.

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# SAFETY PRECAUTIONS

## Operator Protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following:

**WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES** when handling the concentrate or applying the product.

**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.

**WHEN USING DO NOT EAT, DRINK OR SMOKE.**

**IF YOU FEEL UNWELL**, seek medical advice immediately (show the label where possible).

## 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.

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.



**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 Environment 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 HSE's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

## Storage and Disposal

**DO NOT RE-USE CONTAINER** for any purpose. **KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.**

**KEEP OUT OF REACH OF CHILDREN.**

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

**WASH OUT CONTAINER THOROUGHLY**, empty washings into spray tank and dispose of safely.

## **This leaflet is part of the approved label.**

For advice on medical emergencies, fires or major spills telephone the  
National Chemical Emergency Centre on 01865 407333

### **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**

DO NOT treat undersown cereals or those due to be undersown.

Avoid treating crops suffering from stress as a result of drought, waterlogging, grazing, pests or disease attack, nutrient deficiency, soil compaction or other factors reducing crop growth.

Adverse crop effect (paling, reduction in vigour) may occur when there is very wet weather before and after application, particularly on crops grown on light free draining soils or where soils become waterlogged. These effects are typically transitory in nature and will have no adverse effect on crop yield in most cases.

DO NOT use on waterlogged soils or soils prone to water logging.

DO NOT use on sands or very light soils (ADAS 85 classification) or very stony or gravelly soils, as there is a risk of crop damage.

Shallow drilled crops must only be treated post-emergence.

DO NOT treat broadcast crops as uncovered seed may be damaged.

DO NOT soil incorporate.

Avoid spraying during periods of prolonged or severe frosts as sharp or severe frosts following application may cause transitory discoloration or scorch from which the crop will normally recover.

DO NOT use on soils containing more than 10% organic matter.

DO NOT disturb the soil after application (e.g. by harrowing or rolling).

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 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 advisor or product manufacturer.

Key aspects of the HEROLD® Resistance Management Strategy are:

- ALWAYS follow WRAG guidelines for preventing and managing herbicide resistant weeds.
- DO NOT use HEROLD as the sole means of grass weed or broad-leaved weed control in successive crops.
- ALWAYS use grass and broad-leaved weed herbicides with alternative modes of action throughout the cropping rotation.
- ALWAYS monitor weed control effectiveness and investigate any odd patches of poor grass or broad-leaved weed control. If unexplained, contact your agronomist who may consider a resistance test appropriate.

## WEEDS CONTROLLED AT 0.3 L/ha

<b>Annual meadowgrass</b>	Susceptible pre- and post-emergence up to GS 12 (2 leaf stage)
<b>Cleavers**</b>	Moderately resistant pre-emergence
	Moderately susceptible post-emergence up to and including GS 11 (1 whorl stage)
<b>Common chickweed</b>	Susceptible pre- and post-emergence up to the early branching stage (up to 5 cm)
<b>Common field-speedwell</b>	Susceptible pre- and post-emergence up to GS 12 (2 leaf stage)
<b>Field forget-me-not</b>	Susceptible pre-emergence
<b>Field pansy</b>	Susceptible pre- and post-emergence up to GS 12 (2 leaf stage)
<b>Groundsel</b>	Susceptible pre-emergence
<b>Henbit dead-nettle</b>	Susceptible pre- and post-emergence up to GS 12 (2 leaf stage)
<b>Ivy-leaved speedwell</b>	Moderately susceptible pre-emergence
	Susceptible post-emergence up to GS 12 (2 leaf stage)
<b>Mayweeds</b>	Susceptible pre- and post-emergence up to GS 12 (2 leaf stage)
<b>Red dead-nettle</b>	Susceptible pre- and post-emergence up to and including GS 12 (2 leaf stage)
<b>Shepherd's purse</b>	Susceptible pre- and post-emergence up to GS 12 (2 leaf stage)
<b>Volunteer oilseed rape*</b>	Moderately susceptible pre-emergence up to GS 12 (2 leaf stage)

\* Levels of control provided can be variable. In particular strongly established volunteers of oilseed rape (particularly those beyond the 2 leaf stage) may survive and require a follow-up treatment with an appropriate post-emergence herbicide.

\*\* Useful levels of cleaver control can be achieved, but a follow-up treatment with a specific cleaver herbicide may be required in some situations.



Established perennial grasses and broad-leaved weeds growing from rootstocks will not be controlled by HEROLD. Speed of activity can be slow and is dependent on temperature and growing conditions. Activity can be slow under cool conditions and the final level of weed control may take some time to appear. Some soil moisture is required for HEROLD to be activated. Moist soil at, and after application, is required to give the best results. Best results will be obtained if rain falls within 7 days of application. Residual control may be reduced under prolonged dry conditions.

### **CROP SPECIFIC INFORMATION**

Good weed control depends on burying any trash or straw before or during seedbed preparation. Seedbeds must have a firm, fine tilth. Loose or cloddy seed beds must be consolidated otherwise crop damage may result due to inadequate seed cover. For pre-emergence treatments, seed should be covered with a minimum of 32 mm of settled soil.

Use at a rate of 0.3 litres of product/ha. Apply via a horizontal boom sprayer. Apply in 200-400 L/ha as a MEDIUM spray (BCPC category). Use the higher volume where crop or weed foliage is dense. A spray pressure of at least 2 bar is advised. Good, even spray coverage of soil and weeds is essential. Ensure that spray swaths do not overlap. To prevent damage, care must be taken to avoid drift onto neighbouring crops.

**Winter wheat (all varieties):** Apply pre- or post-emergence up to and including second tiller stage (GS 22).

**Winter barley (all varieties):** Apply pre- or post-emergence up to and including third tiller stage (GS 23).

Where the second application of a sequence is made after 31st December, the first application must be made up to and including GS 12 of the crop. A minimum of 6 weeks must elapse between treatments.

Where the total dose is between 0.3-0.6 L/ha and the first application is made after GS 12 of the crop, the latest time of application is 31st December.

A single application of 0.3 L/ha that is not part of a sequence may be made at any time up to and including GS 22 (winter wheat) or GS 23 (winter barley) of the crop and before 31st March.

### **FOLLOWING CROPS and CROP FAILURE**

Plough or cultivate to at least 15 cm before planting following crops of oilseed rape, field beans and edible brassicae. Ensure thorough soil mixing before planting. Plough to at least 15 cm before planting peas, sugar beet, carrots and onions. Ensure thorough soil mixing before planting. Wheat, barley and potatoes can be drilled without any special cultivations. In the event of crop failure, for any reason, plough to at least 15 cm and sow only wheat, barley and potatoes. An interval of 12 weeks should elapse between treatment and subsequent sowing of spring wheat and spring barley.

Where HEROLD and other products containing diflufenican are applied to successive cereal crops, levels of diflufenican (DFF®) will build up in the soil. Ploughing or cultivation, with complete inversion of the furrow, must take place before planting any following non-cereal crop, except

potatoes. Even where ploughing or cultivation is carried out there may still be a risk of damage to following crops of onions, leek and related species, or clover. As a precaution users who rent out their land to growers of these crops should not use DFF-containing products in successive years before renting out the land.

### **MIXING**

Shake the container well before use. Half-fill the spray tank with clean water and add the required amount of HEROLD. Wash out the container and add the washings to the spray solution, before topping up with clean water. Maintain continuous agitation of spray solution. Do not leave the sprayer filled with the spray solution standing for long periods. Wash out the sprayer thoroughly after use using a wetting agent or proprietary tank cleaner with two rinses.

## **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.

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Adama Agricultural Solutions UK Ltd  
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Telephone: 01635 860555  
Technical Helpline: 01635 876622  
www.adama.com  
Email: ukenquiries@adama.com

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