



RELIANCE[®]

HERBICIDE

MAPP 18372

A Suspension Concentrate (SC) formulation containing 200g/L diflufenican and 400g/L flufenacet. Also contains 1,2-benzisothiazol-3(2H)-one.

A contact and residual herbicide for use against a range of annual grasses and broadleaved weeds in winter wheat, winter barley, winter triticale and winter rye.



Warning

Harmful if swallowed.

May cause an allergic skin reaction.

May cause damage to nervous system through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Do not breathe dust/fume/gas/mist/vapours/spray.

Avoid release to the environment.

Wear protective gloves/protective clothing.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

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.

5 Litres

**200 g/L DIFLUFENICAN
400 g/L FLUFENACET**

IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops/ situations	Maximum individual dose (L product/ha)	Maximum total dose (L product/ha/crop)	Latest time of application	Aquatic buffer zone distance (metres)
Barley (winter)	0.6	0.6	Before 4 th tiller stage (BBCH 24)	12
Rye (winter)				
Triticale (winter)				
Wheat (winter)				

OTHER SPECIFIC RESTRICTIONS:

1. This product must not be applied via hand-held equipment.
2. Buffer zones greater than 5m are NOT eligible for buffer zone reduction under the LERAP scheme.
3. Low drift spraying equipment must be operated according to the specific conditions stated in the official three star rating for that equipment as published on HSE Chemicals Regulation Division's website.
These operating conditions must be maintained until the operator is 30m from the top of the bank of any surface water bodies.

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.

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) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate.

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

ENVIRONMENTAL PROTECTION

To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies as specified for the crop. **HORIZONTAL BOOM SPRAYERS MUST BE FITTED WITH THREE STAR DRIFT REDUCING TECHNOLOGY.** Low drift spraying equipment must be operated according to the specific conditions stated in the official three star rating for that equipment as published on HSE Chemicals Regulation Directorate's website.

Maintain three star operating conditions until 30m from the top of the bank of any surface water bodies.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within the distance specified for the crop to the top of the bank of a static or flowing water body, or within 1m of the top of a ditch which is dry at the time of application. Aim spray away from water.
NOTE: BUFFER ZONES OF MORE THAN 5M ARE CANNOT BE REDUCED UNDER THE LOCAL ENVIRONMENT RISK ASSESSMENT FOR PESTICIDES (LERAP) SCHEME.

The statutory buffer zone must be maintained and the distance recorded in Section A of the LERAP record form. The LERAP record form must be kept available for 3 years.

STORAGE AND DISPOSAL

Keep out of reach of children.
Keep away from food, drink and animal feeding stuffs.
Keep in original container, tightly closed, in a safe place.
Wash out container thoroughly, empty washings into spray tank and dispose of safely.
This material and its container must be disposed of in a safe way.

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.

RELIANCE is a contact and residual herbicide for use against a range of annual grasses and broadleaved weeds in winter wheat, winter barley, winter triticale and winter rye.

RESTRICTIONS

1. Do not apply when heavy rain is expected within 12 hours.
2. Do not apply to crops suffering from stress caused by factors such as frost, nutrient deficiency, soil compaction, excessively moist or dry conditions, pest or disease attack.
3. Do not apply to soils with more than 10% organic matter as this may affect product performance.
4. Do not use on very light soils or soils with high stone or gravel content as this may lead to crop damage.
5. Do not incorporate the product in the soil or apply to broadcast crops as uncovered seed may be damaged.
6. Do not apply to undersown cereals or crops planned to be undersown.
7. Do not harrow after application nor roll autumn-treated crops until spring.
8. Avoid drift onto neighboring crops.
9. Take particular care to avoid overlapping of spray swaths.
10. Do not spray during prolonged or severe frost.
11. Do not use on waterlogged areas or areas prone to waterlogging.
12. 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.
13. Consult processor before processing.
14. Effectiveness using three star drift reduction technology may be reduced.

CROP SPECIFIC INFORMATION

For best results, RELIANCE should be applied pre-emergence of the weeds or as soon as possible after emergence.

Application Rate: 0.45 - 0.6L product/ha.

WEED CONTROL

Weed	Dose (L product/ha)	Susceptibility and latest timing
Mayweed species (<i>Matricaria</i> sp.)	0.45	Susceptible pre- and post-emergence up to four true leaves (GS14).
Common poppy	0.45	Susceptible pre- and post-emergence up to two true leaves (GS12).
Common chickweed	0.45	Susceptible pre- and post-emergence up to three side shoots visible (GS23).
Speedwell species	0.45	Susceptible pre- and post-emergence up to three true leaves (GS13).
Field pansy	0.45	Susceptible pre- and post-emergence up to three true leaves (GS13).
Silky bent grass	0.45	Susceptible pre- and post-emergence up to two true leaves (GS12).
Annual meadow grass	0.45	Susceptible pre- and post-emergence up to two true leaves (GS12).
Volunteer oilseed rape	0.45	Susceptible pre- and post-emergence up to first side shoot visible (GS21).
Black-grass	0.6	Moderately susceptible pre- and post-emergence up to one true leaves (GS11).

RESISTANCE

The active substance diflufenican belongs to the F1 group from the HRAC and works by inhibition of carotenoid biosynthesis at the phytoene desaturase step (PDS). The active substance flufenacet belongs to HRAC Group K3 and works by the inhibition of cell division.

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.

Key aspects of the RELIANCE Resistance Management Strategy are:

- ALWAYS follow WRAG guidelines for preventing and managing herbicide resistant weeds.
- DO NOT use RELIANCE as a stand-alone treatment for black-grass control. Use only in tank-mix or sequence with effective herbicides with alternative modes of action.
- DO NOT use RELIANCE 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.

MIXING AND SPRAYING

Before spraying ensure the sprayer is clean and in good working order. Half fill the sprayer with clean water and begin to agitate. Add the required quantity of RELIANCE and complete filling whilst continuing to agitate. Continue to agitate during spraying.

Apply in 200 – 500L water/ha as a medium spray, using a horizontal boom sprayer. A spray pressure of at least 2 bars 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 sensitive crops (e.g. oilseed rape).

After Spraying

Wash out the sprayer thoroughly after use using a recognised tank cleaner or wetting agent.

After using RELIANCE empty the tank completely and drain the whole system.

Thoroughly wash the inside of the tank with a pressure hose. Quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles, then drain. Quarter fill the tank again, add a suitable detergent (tank cleaner or wetting agent) and circulate through the system for at least 15 minutes. Drain, remove filters and nozzles and clean separately. Rinse the inside of the tank thoroughly using a pressure hose and flush system with clean water.

SUCCEEDING CROPS

Where RELIANCE and other products containing diflufenican are applied to successive cereal crops, levels of diflufenican 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 diflufenican-containing products in successive years before renting out the land.

Following a normal crop rotation, no minimum waiting period is required. It is safe to plant either a cereal or potato crop without any special cultivations. Oilseed rape, field beans and edible brassicae, as part of a normal crop rotation, may be planted only following soil cultivation to 20cm. Plough to 20cm before planting peas, sugar beet, carrots and onions. Ensure thorough soil mixing before planting. Grasses (including Ryegrass) should not be sown in the same season following application.

In the event of crop failure, either wheat, barley or potatoes can be drilled or planted following soil cultivation to at least 20cm.

COMPATIBILITY

For up to date information on compatibilities please refer to uk.uplonline.com

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and suitable for use and we believe them to be suitable. However, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during and after application which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded, and no responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. Our staff or agents cannot vary these conditions whether or not they supervise or assist in the use of such goods. Brand names used in this label may be registered trademarks of UPL Europe Ltd, or other manufacturers in which propriety rights may exist.

To access the Safety Data Sheet for RELIANCE
please use the link below or scan the code.



uk.uplonline.com/cropproductportfolio

Alternatively, contact your local supplier.

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SHAKE WELL BEFORE USE PROTECT FROM FROST

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For Batch Number and
Manufacturing Date see container.

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For 24 hour emergency information contact:
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The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.