MAPP 16967
Suspension Concentrate (SC) containing 500 g/l diflufenican.
Selective contact and residual herbicide in spring barley, winter wheat, winter barley, winter rye and triticale
for the control of annual broad-leaved weeds.

Warning
Very toxic to aquatic life with long lasting effects.
Avoid release to the environment.
Collect spillage.
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.
### IMPORTANT INFORMATION

**FOR USE ONLY AS AN AGRICULTURAL HERBICIDE**

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<tr>
<th>Crops</th>
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<td>Winter triticale</td>
<td>0.25 litre/ha</td>
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<td>0.125 litre/ha</td>
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**Other specific restrictions:**

1. 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 the ‘Local Environment Risk Assessment for Pesticides Horizontal Boom Sprayers’ booklet available from the HSE Chemicals Regulation Directorate’s website or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

2. When used on crops/situations with a greater than 5m buffer zone this product must not be applied via hand-held equipment.

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**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 GLOVES** when handling the concentrate or handling contaminated surfaces.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
WHEN USING DO NOT EAT, DRINK OR SMOKE.
WASH HANDS/EXPOSED SKIN before eating and drinking/smoking/after work.

Environmental protection
To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.
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. ALL CROPS WITH A BUFFER ZONE GREATER THAN 5M ARE NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME. 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 CRD’s published guidance or the statutory buffer zone as appropriate to the crop must be maintained. NOTE ALL BUFFER ZONES OF MORE THAN 5M ARE NOT REDUCIBLE. The results of the LERAP must be recorded and kept available for three years.
EXTREMELY DANGEROUS TO FISH OR OTHER AQUATIC LIFE. Do not contaminate surface waters or ditches with chemical or used container.

Storage and disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
KEEP OUT OF THE REACH OF CHILDREN.
WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

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.
SEMPRA is a suspension concentrate formulation, which is used as a selective contact and residual herbicide in winter cereals and spring barley to control annual dicotyledons. Under favourable growing conditions, the residual activity can last for up to 8 weeks after application. The level of effective residual control may be reduced under dry conditions, when poor coverage of the soil surface is achieved, when the crop is planted in non-wetting sand or where soils have a high content of clay or organic matter.
This product is taken up by the shoots of germinating seeds and seedlings. Susceptible weeds germinate but show immediate chlorosis followed by a mauve-pink discolouration. The chlorosis spreads with the aerial growth and the plants become necrotic and die back.
After application, some transient crop discolouration may occur, which will have no effect on the subsequent growth. SEMPRA is a selective herbicide for use pre and post-emergence up to BBCH 30 in winter wheat and winter barley; pre or post-emergence up to BBCH 14 in winter rye; post-emergence up to BBCH 30 in spring barley and pre-emergence in winter triticale.

**Restrictions**

Maximum number of applications: one per crop.

Do not apply when heavy rain is expected within 4 hours or on crops suffering from stress, frost, nutrient deficiency, excessively moist or dry conditions, pest or disease attack or pre-emergence applications.

Do not use on other cereals, broadcast or undersown crops or crops to be undersown.

Do not apply to soils with more than 10% organic matter.

Use on Sands (soil texture [85] system) or very stony or gravely soils may result in crop damage.

Do not harrow after application nor roll autumn-treated crops until spring.

Avoid drift onto neighbouring crops.

Avoid overlapping spray bouts.

**Weed control**

SEMPRA controls the following weeds:

<table>
<thead>
<tr>
<th>Weed</th>
<th>Susceptibility at 0.2 or 0.25 litre/ha, pre-emergence</th>
<th>Susceptibility at 0.125 litre/ha, post-emergence up to the following leaf stage</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Black bindweed</td>
<td>S (0.2 litre/ha)</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Common Chickweed</td>
<td>S (0.2 litre/ha)</td>
<td>2 TL</td>
<td>4 TL</td>
</tr>
<tr>
<td>Common field speedwell</td>
<td>S (0.2 litre/ha)</td>
<td>2 TL</td>
<td>6 TL</td>
</tr>
<tr>
<td>Corn spurrey</td>
<td>S (0.2 litre/ha)</td>
<td>2 TL</td>
<td>4 TL</td>
</tr>
<tr>
<td>Field forget-me-not</td>
<td>S (0.2 litre/ha)</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Field mouse ear</td>
<td>S (0.2 litre/ha)</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Common poppy</td>
<td>S (0.25 litre/ha)</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Flixweed</td>
<td>S (0.25 litre/ha)</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Henbit dead-nettle</td>
<td>S (0.25 litre/ha)</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Knotgrass</td>
<td></td>
<td>2 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Nipplewort</td>
<td></td>
<td>2 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Perennial sowthistle</td>
<td>1 TL</td>
<td>1 TL</td>
<td>1 TL</td>
</tr>
<tr>
<td>Prickly sowthistle</td>
<td>1 TL</td>
<td>1 TL</td>
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</tr>
<tr>
<td>Red dead-nettle</td>
<td>S (0.25 litre/ha)</td>
<td>2 TL</td>
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</tr>
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<td>Shepherd’s purse</td>
<td>2 TL</td>
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<td>4 TL</td>
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<td>Smooth sowthistle</td>
<td>1 TL</td>
<td>1 TL</td>
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</tr>
<tr>
<td>Treacle mustard</td>
<td>S (0.25 litre/ha)</td>
<td>1 TL</td>
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<tr>
<td>Volunteer oilseed rape</td>
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<td>Wild pansy</td>
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<td>Wild radish</td>
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S = Susceptible (> 85% effect) (at specified dose))

TL = True leaves
Crop specific information
Winter cereals (winter wheat, winter barley, rye, and triticale).

Pre-emergence application (winter wheat, winter barley, winter rye and triticale).
SEMPRA should be applied shortly after sowing. Seed beds should be fine and firm and should not contain clods greater than fist size. For optimal efficiency, it is advised to apply under moist conditions at or after application and rainfall during the first weeks after application. On weak plants, a colouring of the first leaf can occur. This will have no impact on yield. Drill crop to normal depth (25 mm) and ensure seed well covered. Only the following named varieties of rye and triticale may be treated: Winter rye: ‘Amino’, ‘Ashill Pearl’, ‘Dominant’, ‘Lovaszpatonai’, ‘Rheidol’, ‘Tetragorzow’. Triticale: ‘Aquarius’, ‘Bokolo’, ‘Clercal’, ‘Newton’, ‘Salvo’, ‘Torris’.
Dose: 0.25 litre/ha.

Post-emergence application
In winter wheat and winter barley the application can be made from emergence until end of tillering. For winter rye application can be made from emergence up to the 4 true leaf stage.
Dose: 0.25 litre/ha

Spring barley
Apply from mid of tillering until the end of tillering.
Dose: 0.125 litre/ha

Following crops
In the event of crop failure, winter wheat may be redrilled immediately after normal cultivation and winter barley may be sown after ploughing. Fields must be ploughed to a depth of 15 cm and 20 weeks must elapse before sowing spring crops of wheat, barley, oilseed rape, peas, field beans, sugar beet, potatoes, carrots, edible brassicas or onions. After normal harvest autumn cereals can be drilled after ploughing. Thorough mixing of the soil must take place before drilling field beans, leaf brassicae or winter oilseed rape. For sugar beet seed crops and winter onions complete inversion of the furrow slice is essential. Successive treatments of any products containing diflufenican can lead to soil build-up and inversion ploughing must precede sowing and following non-cereal crop. Even where ploughing occurs some crops e.g. onion, leek, other allium crops and clover may be damaged. As a precaution, users who rent out their land to growers should not use diflufenican containing products in successive years before renting out the land.
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 SEMPRA and complete filling. Continue to agitate during spraying. Apply in 200-300 litres/ha water as a medium spray (BCPC category). Increase the water volume where weed infestation is heavy or the crop cover is dense. Complete coverage of weeds is essential. Wash out the sprayer thoroughly after use using a recognised tank cleaner or wetting agent.

Tank cleaning
After using SEMPRA empty the tank completely and drain the whole system. Thoroughly wash inside 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 and circulate through the system for at least 15 minutes. Drain, remove filters and nozzles and clean separately. Rinse inside the tank thoroughly using a pressure hose and flush system with clean water.

CONDITIONS OF SUPPLY
All goods supplied by us are of high grade and we believe them to be suitable but, 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. SEMPRA is a registered trademark of United Phosphorus Limited. Other brand names used in this guide are trademarks of other manufacturers for which propriety rights may exist.

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

Alternatively, contact your local supplier.
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**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.**

**SHAKE WELL BEFORE USE**

**UPL Europe Ltd.** The Centre, Birchwood Park, Warrington, WA3 6YN

**Telephone:** 01925 819999    **Fax:** 01925 817425

**For 24 hour emergency information contact:**
**CARECHEM24 : +44 (0) 1235 239670**

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.