

# Entail®

A oil dispersion formulation containing 240 g/l (23.5% w/w) of nicosulfuron

**Product Registration Number MAPP 15671**

A herbicide for control of a range of grass and broad-leaved weeds in grain and forage maize.  
The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

To access the Safety Data Sheet for this product, scan the QR code or use the website below:  
<http://www.headland-ag.co.uk/product-downloads.aspx?ID=300>  
Alternatively, contact your supplier.



Product identifier: Nicosulfuron 240 g/l SC

## Warning

Causes skin irritation.

May cause an allergic skin reaction.

Very toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Wear protective gloves.

IF ON SKIN: Wash with plenty of soap and water.

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

Take off contaminated clothing and wash before reuse.

Dispose of contents/container as hazardous waste.



## To avoid risks to human health and the environment, comply with the instructions of use.

### IMPORTANT INFORMATION: FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

| Crops/situations:            | Maximum individual dose (ml product/hectare): | Maximum number of treatments: | Latest time of application:                        |
|------------------------------|---|-------------------------------|--|
| Grain Maize,<br>Forage Maize | 170   | One per crop                  | Up to and including the '8 true leaf' stage (GS18) |

**Other specific restrictions:** 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. To avoid the build-up of resistance, do not apply this or any other product containing an ALS-inhibitor herbicide with claims for control of grass weeds more than once to any crop. Non-returnable containers must not be re-used for any purpose.

**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.**

**Manufactured by :** Cheminova A/S, Denmark

**Distributed by:**

**Headland Agrochemicals Ltd.**  
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This label is compliant with the  
CPA Voluntary Initiative Guidance

The Voluntary Initiative

**NET CONTENTS: 1 litre**

## DIRECTIONS FOR USE

**Important:** This information is approved as part of the product label. All instructions within this section should be read carefully in order to obtain safe and successful use of this product.

**General Information:** Entail is a highly active sulfonyl-urea herbicide with foliar and root activity for post-emergence use against a range of broad-leaved and grass weeds in forage and grain maize. It is most effective when applied to actively growing weeds. Good spray cover of the weeds must be obtained. Weed control may be reduced when soil conditions are very dry, however with adequate soil moisture, susceptible weeds germinating soon after treatment will be controlled.

## Cautions

- Do not apply Entail to a crop to which an organophosphate soil insecticide has been applied.
- Under certain conditions, some transient yellowing, crop stunting and/or loss of vigour may be observed within 1-2 weeks after treatment. These will soon be outgrown and will not adversely affect yield.
- Do not apply this product to any crop suffering from stress as this may lead to more persistent crop damage. Avoid overlapping spray swaths which may cause substantial crop damage leading to loss of yield.
- Strains of some annual grass weeds (e.g. black-grass, wild-oat, Italian ryegrass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing 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.
- Avoid using Entail (or any other ALS-inhibiting herbicide) as the sole means of weed control in successive crops. Do not use the product to control light infestations of weeds.
- Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area. Thorough cleaning of equipment is also very important - see SPRAY TANK CLEAN-OUT.
- This product may cause flower deformation on particularly sensitive varieties.
- Do not apply this product to any maize crop in sequence or in tank-mixture with any product containing an 'ALS inhibiting' herbicide.

**Soil Types and Weather Conditions:** Entail can be applied to all soil types. Very dry soil conditions may reduce weed control.

**Weed Control:** The susceptibility ratings of weeds in the weed control table assume good spray cover and growing conditions. An esterified rapeseed oil adjuvant should be used with the herbicide, at a concentration of 0.5% of total spray volume. Headland Fortune (ADJ 0703) is recommended.

| Application Rate ml/s product/ha | Weed Control           |
|----------------------------------|------------------------|
| Annual Meadow-grass              | Susceptible            |
| Italian Ryegrass                 | Susceptible            |
| Perennial Ryegrass               | Susceptible            |
| Black-bindweed                   | Moderately susceptible |
| Black Nightshade                 | Moderately susceptible |
| Common Amaranth                  | Susceptible            |
| Common Hemp-nettle               | Moderately susceptible |
| Fat-hen                          | Susceptible            |
| Field Pansy                      | Moderately susceptible |
| Groundsel                        | Susceptible            |
| Redshank                         | Moderately susceptible |
| Shepherd's-purse                 | Susceptible            |

**Susceptible weeds:** Generally 80-100 % control may be expected in good conditions.

**Moderately susceptible weeds:** Generally 70-90% control may be expected in good conditions.

**Moderately resistant weeds:** Generally 60-80% control may be expected in good conditions.

**Weed Resistance:** When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominant. A weed species is considered resistant to a herbicide if it survives correctly applied treatment at the recommended dose.

Development of resistance within a weed species can be avoided or delayed by sequencing or tank-mixing with suitable products having a different mode of action. This is particularly important if continuous maize if grown.

Entail is a sulfonylurea herbicide. Its mode of action is via ALS inhibition. Use only as part of a resistance strategy that includes cultural methods of control and does not use Entail or any other ALS inhibitor as the sole chemical method of grass weed control. A strategy for preventing and managing resistance should be adopted. The Weed Resistance Action Groups have produced guidelines and copies are available from HGCA, CPA, your distributor, crop adviser or product manufacturer. This product contains nicosulfuron which is an ALS inhibitor, also classified by the Herbicide Resistance Action Committee as 'Group B'.

**Application Rates and Timings:** Apply 170 ml/ha at the 2 to 8 leaf stage of the crop (2 leaf to early tillering stage of grass/weeds; 2 to 6 leaf stage of broad-leaved weeds). Select the rate according to the target species as listed in the weed control table above. An esterified rapeseed oil adjuvant should be used with the herbicide, at a concentration of 0.5% of total spray volume. Headland Fortune (ADJ 0703) is recommended.

**Water Volume:** Apply in 200 – 400 litres of water per hectare, using suitable equipment to give good spray cover of the weeds. When applying Entail extreme care should be taken not to overlap spray swaths. Entail should be applied as a MEDIUM spray (as defined by BCPC).

**Mixing and Application:** Half-fill the spray tank with clean water and begin agitation. Add the required quantity of Entail to the water. Rinse the empty container thoroughly with water three times and add the rinsings to the tank. Complete the filling and add the adjuvant oil to the spray tank as the last operation. Apply without delay. Maintain agitation while travelling and throughout the spraying operation.

**Wash out the sprayer:** Wash out the sprayer thoroughly after use using a recognised tank cleaner following the 'Spray Tank Clean-out' guidance below. **Following Crops:** In normal rotation, after ploughing, winter wheat, winter barley, winter rye and triticale may be sown. All other crops may be sown the following spring. In the event of crop failure, maize can be sown after ploughing.

**Spray Tank Clean-out:** To avoid subsequent damage to sensitive crops thoroughly remove all traces of Entail from spraying equipment immediately after spraying, using the following procedure:

1. Immediately after spraying, drain the tank completely. Wash any contamination off the outside of the sprayer with clean water.
2. Rinse the inside of tank with clean water and flush at least one tenth of the spray tank volume through the boom and hoses. Drain the tank completely.
3. Half-fill the tank with clean water and add the correct quantity of ALL CLEAR™ EXTRA. Agitate and then flush the boom and hoses with the solution. Top up completely with water and allow to stand for 15 minutes with agitation.
4. Again flush the boom and hoses and drain tank completely (if it is not possible to drain tank completely, repeat step 3 before going on).
5. Remove all the nozzles and filters and soak them in a bucket containing 50mL ALL CLEAR™ EXTRA per 10 litres water.
6. Rinse tank again with clean water and flush at least one tenth of the tank volume through the boom and hoses. Drain the tank completely.
7. For disposal of washings, follow the Code of Practice for the Safe Use of Pesticides on Farms and Holdings. Do not spray onto sensitive crops or land intended for planting with sensitive crops.

## Safety Precautions

**(a) Operator protection:** Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:  
Operators must 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.

**(b) Environmental protection:** Since there is a risk to aquatic life from users not applying the statutory buffer zone must either themselves carry out or ensure that someone else has carried out a Local Environment Risk Assessment for Pesticides (LERAP) on their behalf before each spraying operation from a horizontal boom sprayer. Users must not allow direct spray from such sprayers to fall within 5m of the top of the bank of a static or flowing waterbody or within 1m of a ditch which is dry at the time of application (these distances to be measured as set out in the booklet 'Local Environment Risk Assessment for Pesticides - Horizontal Boom Sprayers' and any amendments that are made to it) unless:

- (a) The LERAP indicates that a narrower buffer zone will be sufficient; and
- (b) Any measures indicated by the LERAP as justifying the narrower buffer zone are complied with in full and in accordance with any conditions applicable to them.

Spray must be aimed away from water.

Spray from hand-held sprayers must not be allowed to fall within 1 m of the top of the bank of a static or flowing waterbody.

Spray must be aimed away from water.  
The results of the LERAP must be recorded in written form and must be available for a period of three years for inspection to any person entitled to exercise enforcement powers under or in connection with the Plant Protection Products Regulations 2011 or the Plant Protection Products (Sustainable Use) Regulations 2012. (An electronic record will satisfy the requirement for a written record, providing it is similarly available for inspection and can be copied).

Detailed guidance on LERAPs and how to conduct a LERAP are contained in the booklet 'Local Environment Risk Assessment for Pesticides - Horizontal Boom Sprayers', available from HSE Chemicals Regulation Directorate's website. All LERAPs must be carried out in accordance with this Guidance and any amendments that are made to it.

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

**(c) Other specific restrictions:** 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.

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