

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.
WHEN USING DO NOT EAT, DRINK OR SMOKE.
WASH CONCENTRATE from eyes or skin immediately.
DO NOT BREATHE SPRAY.
WASH HANDS AND EXPOSED SKIN before eating and drinking, and after work.

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 of 5m to surface water bodies

Storage and disposal:
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
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.
DO NOT RE-USE CONTAINER for any purpose.

PROFESSIONAL USE ONLY
PROTECT FROM FROST.
Triple Rinse Containers - Puncture and invert to Dry at time of Use
READ DIRECTIONS FOR USE ON ATTACHED LEAFLET.



Starane® Hi-Load HL

HERBICIDE

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PCS N° 04549
An emulsifiable concentrate containing 480 g/litre (20.7% w/w) fluroxypyr as the 1-methyl fluro ester (333 g/litre acid equivalent).

A selective post-emergent herbicide for use on WINTER and SPRING CEREALS, FORAGE MAIZE, GRASS SEED CROPS and NEWLY SOWN LEYS to control a range of annual weeds, including LEAVERS, COMMON CRACKWEED, FIELD FORGET-ME-NOT, COMMON NEMP-NETTLE and BLACK-BINDWEED.

Authorisation Holder:

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IMPORTANT INFORMATION.

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop Wheat (winter), barley (winter), oats (winter), rye (winter), wheat (spring), barley (spring), oats (spring), rye (spring), triticale, durum wheat, spelt, forage maize, newly sown grass leys, grass seed crops.

Maximum Individual Dose: } Full details are given in the

Maximum Total Dose: } Important Information area

Latest Time of Application: } on the attached leaflet

Other Specific Restrictions: }

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.



Starane® High-Load HL

WARNING

May cause allergic skin reaction.

Causes serious eye irritation.

May cause respiratory irritation.

Very toxic to aquatic life with long lasting effects.

Avoid breathing mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Dispose of contents/container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed 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.

PCS No. 04549



15mm

SPECIMEN DATE
2021 to

EU 513 CCL FRANCE - CCL UK - CCL ITALY

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.

IMPORTANT INFORMATION FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop	Maximum Individual Dose	Maximum Total Dose	Latest Time of Application
Winter cereals (wheat, barley)	0.6 litres product per hectare	0.6 litres product per hectare per crop	Before flag leaf sheath opening stage (GS45 inclusive)
Winter cereals (Triticale)	0.6 litres product per hectare	0.6 litres product per hectare per crop	Before flag leaf sheath extending stage (GS 39 inclusive)
Rye, winter oats, durum wheat	0.6 litres product per hectare	0.6 litres product per hectare per crop	Before second node detectable stage (GS 31 inclusive)
Spring cereals (wheat, barley)	0.45 litre product per hectare	0.45 litre product per hectare per crop	Before flag leaf sheath extending stage (GS 39 inclusive)
Spring Oats	0.45 litres product per hectare	0.45 litres product per hectare per crop	Before second node detectable stage (GS 31 inclusive)
Forage maize	0.6 litre product per hectare	0.6 litre product per hectare per crop	Before seven leaves unfolding stage
Newly sown grass leys and grass for seeds	0.45 litre product per hectare per year	0.45 litre product per hectare per year	GS 32

Other Specific Restrictions:

A maximum total dose of 0.45 litres per hectare must be observed for applications made to crops between crop emergence in the year of planting and 1st February in the year of harvest. **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.**

NOTES

For best results apply STARANE HI-LOAD HL when weeds are actively growing. In newly-sown crops, seeding and small weeds are more susceptible to STARANE HI-LOAD HL and will respond quicker when treated at this stage. Vigorous crop competition enhances control of the more resistant weeds and prevents weeds which germinate after application from becoming a problem in the crop.

Crops undersown with grass may be sprayed provided the grasses are tillering.

Do not apply to crops undersown with clover or other legume-containing mixtures.

STARANE HI-LOAD HL is of low volatility and is therefore not subject to vapour drift.

Do not spray in windy weather and avoid drift onto non-target crops/areas.

Do not treat crops under stress. Stress can be caused by many factors including frost, drought, water-logging, trace element deficiency, disease and pest attack etc.

Do not spray if night temperatures are low (<6°C) or if frost is imminent.

STARANE HI-LOAD HL used alone is rain-fast one hour after application.

Do not roll or harrow 7 days before or after treatment.

Keep livestock out of treated areas for at least 7 days and until poisonous weeds such as ragwort have died and become unpalatable.

Wash equipment thoroughly with water and detergent immediately after use as traces of STARANE HI-LOAD HL can cause harm to susceptible crops sprayed later.

MIXING

Add the appropriate amount of STARANE HI-LOAD HL to clean water in a half-filled sprayer tank, mix thoroughly and add the remainder of the water. The spray mix must be used immediately and agitated continuously during mixing and until application is complete.

VOLUME

Using standard nozzles the recommended spray volume is 70 to 400 litres of water per hectare. The lowest water volume should only be used in very open crops on small weeds. On later applications where the crop is dense, the spray volume should be increased to 400 litres water per hectare. The minimum recommended pressure is 2 to 3 bars.

SPRAY QUALITY

Apply STARANE HI-LOAD HL as a MEDIUM spray as defined by the BCPC system.

MODE OF ACTION AND RESISTANCE MANAGEMENT

Fluroxypyr is the active substance included in STARANE HI-LOAD HL. Fluroxypyr belongs to the synthetic auxin herbicide family (Group "D" according to HRAC classification). In Europe, there is no resistance or cross-resistance issue to fluroxypyr of any tested biotype of the susceptible weeds species (cleavers, Common chickweed, Common hemp nettle, field bindweed). The risk of resistance development of broad leaved weeds to fluroxypyr is unlikely and STARANE HI-LOAD HL can be used for controlling all biotypes - including those which are resistant to other modes of actions (e.g. Common chickweed, Common hemp nettle).

In order to reduce the risk of resistance developing, consider using products of different mode of action when carrying out repeat treatments.

EFFICACY

STARANE HI-LOAD HL controls susceptible broad leaved weeds which are already emerged. The efficacy is not influenced by the soil type but it is influenced by the weed species, the weed growth stage (young weeds are more susceptible) and weather conditions. Efficacy is optimized under good growing conditions. Efficacy can be reduced by cold temperatures (less than 10°C) or dry conditions.

CEREALS

CROPS AND TIMING

STARANE HI-LOAD HL alone can be applied from the two leaf stage of the crop up to and before the following growth stages:

Winter wheat and winter barley: before flag leaf sheath opening stage (GS 12-45 inclusive).

Winter Triticale: before flag leaf sheath extending stage (GS 12-39 inclusive)

Winter oats, rye, durum wheat: before second node detectable (GS12-31 inclusive)

WINTER AND SPRING APPLICATION TO WINTER CEREALS

Wheat, barley, oats, rye, durum wheat, triticale and spelt

RATES OF USE, WEED SUSCEPTIBILITY AND MAXIMUM SIZE CONTROLLED

Product and rate of use per hectare	0.6 litre STARANE HI-LOAD HL
Cleavers	Flowering
Common chickweed	
Common hemp-nettle	
Field forget-me-not	
Black bindweed	2 true leaves
Henbit dead-nettle	4 true leaves
Red dead-nettle	2 true leaves
Common fumitory	
Knottgrass	
Common field-speedwell	
Groundsel	
Ivy-leaved speedwell	Checked at 2 true leaf stage only
Mayweed spp	
Pale persicaria	
Redshank	
Bugloss	
Charlock	
Common poppy	
Common arigold	
Fat-hen	
Field pennycress	
Scarlet pimpernel	
Shepherd's purse	
Smooth nettle	
Yellow radish	
Volunteer rape	
Resistant	

SPRING APPLICATION TO SPRING CEREALS

CROPS AND TIMING

Spring wheat, spring barley, spring oats

STARANE HI-LOAD HL alone can be applied from the two leaf stage of the crop up to and before the following growth stages:

Spring wheat and spring barley: Before flag leaf sheath opening stage (GS 12-39 inclusive).

Spring oats: before second node detectable (GS 12-31 inclusive)

RATES OF USE, WEED SUSCEPTIBILITY AND MAXIMUM SIZE CONTROLLED

Product and rate of use per hectare	0.45 litre STARANE HI-LOAD HL
Cleavers	100 mm
Common chickweed	100 mm
Common hemp-nettle	100 mm
Field forget-me-not	50 mm
Black bindweed	4 true leaves
Common fumitory	2 true leaves
Knottgrass	2 true leaves
Corn spurrey	2 true leaves
Groundsel	
Mayweed spp	
Pale persicaria	
Redshank	Checked at 2 true leaf stage only
Speedwell spp	
Common arigold	
Common poppy	
Common field-speedwell	
Common field-bindweed	
Fat-hen	
Shepherd's purse	
Smooth nettle	Resistant

NEWLY SOWN GRASS LEYS

WEEDS CONTROLLED

Weed	Rate of use litres/ha	Weed size controlled
Common chickweed	0.45	50 mm

RATE OF USE AND WATER VOLUME

Apply STARANE HI-LOAD HL at 0.45 litre/ha in a spray volume of 200 to 400 litres of water per hectare to give good coverage of the weed.

Use the higher volume of water where weeds, especially common chickweed, are large at the time of spraying and where the grass is dense.

TIMING

Application timing is crucial and STARANE HI-LOAD HL should be applied when weeds are actively growing.

Autumn application
Apply STARANE HI-LOAD HL in early autumn when the grasses have at least 3 fully expanded leaves. Best control is achieved if STARANE HI-LOAD HL is applied when the weeds are growing actively.

Spring application
Apply STARANE HI-LOAD HL to newly sown spring leys when grasses have at least 3 fully expanded leaves.

GRASS FOR SEED

Autumn application

Apply STARANE HI-LOAD HL in early autumn when the grasses have at least 3 fully expanded leaves (GS 13-32). Best control is achieved if STARANE HI-LOAD HL is applied when the weeds are growing actively.

Spring application

Apply STARANE HI-LOAD HL to newly sown spring leys when grasses have at least 3 fully expanded leaves (GS 13-32).

FORAGE MAIZE

NOTES

Do not apply in tank mix with any other product or if the crop is beyond the recommended growth stage.

WEEDS CONTROLLED

STARANE HI-LOAD HL will control the following weed species. Those germinating after treatment will not be controlled.

	STARANE HI-LOAD HL at 0.6 L/ha
Black nightshade	S

TIMING

STARANE HI-LOAD HL can be applied from the 3 leaf stage (GS 13) to before the 7 leaves unfolding stage (GS 16).

Do not apply once the buttress roots (side roots) have started to develop on the first node.

NEIGHBOURING CROPS

STARANE HI-LOAD HL is of low volatility and is therefore not subject to vapour drift. Do not spray in windy weather and avoid spray drift onto non-target crops. Spray drift can be injurious to various susceptible crops so that a 3-5 m buffer zone must be observed when spraying close to vines, orchards, sunflower, legumes, vegetable crops, ornamentals, insect, sugar beet, potatoes etc.

SUCCEEDING CROPS

Crop failure
In the event of a cereal crop failure the following crops can be sown: Spring cereals, spring oilseed rape, maize, onion, cultivated poppies and new leys. A minimum interval of 5 weeks is required and there are no cultivation restrictions.

Rotational crops

All crops can be sown following an application of STARANE HI-LOAD HL. Consider all herbicides used on the treated field before deciding the new crop to be sown. For the latest advice please contact Corteva Agriscience or the product supplier.

TANK WASHING

Traces of STARANE HI-LOAD HL can cause harm to susceptible crops sprayed later. Carefully rinse the bottle after use and pour the rinsing water into the spray tank. Ensure the empty bottle cannot be re-used.

Following use thoroughly wash the spraying equipment. If there is any contamination on the outside of the sprayer wash with clean water. Rinse the inside of the spray tank with clean water and pump through spray pipes and nozzles to remove any contamination. Re-fill spray tank with a minimum of 10% of the total spray tank volume and re-circulate water for approximately 10 minutes. Safely dispose of spray rinse water.

Dispose of empty containers responsibly.

Trademark Acknowledgement

STARANE HI-LOAD HL is a trademark of Corteva Agriscience and its affiliated companies. All other brand names used in this document are trademarks of other manufacturers in which proprietary rights may exist

Corteva Agriscience 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 or 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. 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. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:



<https://www.corteva.ie/content/dam/dpavca/corteva/eu/files/SDS/STARANE-HILOAD-IRL-SDS.pdf>

Alternatively contact your supplier