# SAFETY PRECAUTIONS

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

WEAR SUITABLE PROTECTIVE GLOVES (NEOPRENE OR NITRILE) when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES when applying by hand-held equipment.

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

DO NOT BREATHE SPRAY.

WHEN USING DO NOT EAT. DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before eating and drinking or smoking and after work.

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 yards and roads.

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

Established Grassland only - 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 fail within 5 m of the top of the bank of a static or flowing water body, unless a local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a dich which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fail within 1 m of the top of the bank of a static or flowing water body. 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, efficient a LERAP must be carried out in accordance with CRD'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.

Livestock must be kept out of treated areas. IF RAGWORT IS PRESENT, FOLLOW THE SUIDANCE IN THE 'DIRECTIONS FOR USE'.

#### Storage and disposal:

KEEP OUT OF FÉACH OF CHILDERN. KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS. KEEP IN ORIGINAL CONTAINER, tighty 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.





## HERBICIDE

™ <sup>®</sup> Trademark of Corteva Agriscience and its affiliated companies.

## GROUP B O HERBICIDES

## Product Registration Number: MAPP 19938

An emulsifiable concentrate containing 80 g/litre (7.69% w/w) clopyralid, 2.5 g/litre (0.24% w/w) florasulam and 144 g/litre (13.85% w/w) fluroxypyr-meptyl (100 g/litre acid equivalent).

A post-emergence herbicide for use on NEW SOWN LEYS AND ESTABLISHED GRASSLAND FOR GRAZING ONLY, GRASS FOR SEED, FORAGE MAIZE, WINTER AND SPRING WHEAT, BARLEY, OATS, RYE, SPELT, DURUM WHEAT and WINTER TRITICALE and these crops UNDERSOWN WITH GRASS for the control of DAISY, DANDELION, CLOVER, BUTTERCUP, RIBWORT PLANTAIN, CLEAVERS, COMMON CHICKWEED and other broad-leaved weeds.

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

READ DIRECTIONS FOR USE ON ATTACHED LEAFLET Shake well before USE Protect from Frost

This label is compliant with the CPA Voluntary Initiative Guidance.

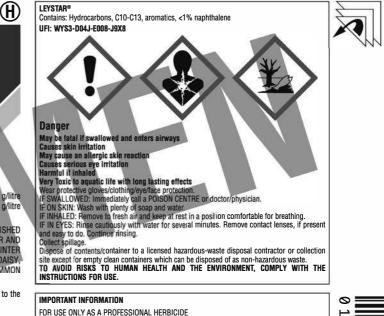
## Authorisation Holder:

Corteva Agriscience UK Limited

CPC2 Capital Park, Fulbourn, Cambridge, CB21 5XE. Telephone: (01462) 457272 24 Hour Emergency Telephone Number: +44 (0) 161 884 1235 Technical Hotline: 0800 689 8899 or e-mail: ukhotline@corteva.com

Technical Hotline: 0800 689 8899 or e-mail: ukhotline@corteva.con National Poisons Information Service: 111

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## SE UNLI AS A PROFESSIONAL PERDICID

Grassland (established), Grassland (newly sown), Grassland (seed), Forage maize. Winter sown cereals (wheat, barley, rye, triticale, spelt) Winter sown cereals undersown with grass Spring sown cereals undersown with grass Winter oat, spring oat, oats undersown with grass

Maximum Individual Dose: Maximum Number of Applications:

 Maximum Number of Applications:
 Full

 Latest Time of Application:
 } area

 Other Specific Restrictions:
 }

Winter oat, spring oat, oats undersown with gra: }
Full details are given in the Important
}
area on the attached 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 protections products.



#### IMPORTANT INFORMATION

## 

FOR USE ONLY AS A PROFESSIONAL	L HERBICIDE			
Situation	Maximum Individual Dose	Maximum Number of Applications	Latest Time of Application	Aquatic buffer zone
Grassland (established)	See Other Specific Restriction 9	One per year	See Other Specific Restriction 9	5 meters
Grassland (newly sown)	See Other Specific Restriction 10	One per year	See Other Specific Restriction 10	No buffer zone required
Grassland (seed crops)	1.0 litre of product per hectare	One per year	30 <sup>th</sup> September (see Other specific restrictions 11)	No buffer zone required
Forage maize	1.0 litre of product per hectare	One per year	Before seven leaves unfolded (see Other specific restriction 3)	No buffer zone required
Wheat, Barley, Rye, Triticale, Spelt (Winter) (Undersown with grass)	1.0 litre of product per hectare	One per year	Before flag leaf sheath extending (GS39) (see Other specific restriction 3)	No buffer zone required
Wheat, Durum wheat, Barley, Rye (Spring) (Undersown with grass)	1.0 litre of product per hectare	One per year	Before flag leaf sheath extending (GS39) (see Other specific restriction 3)	No buffer zone required
Oats (Undersown with grass)	1.0 litre of product per hectare	One per year	Before second node detectable stage (GS31) (see Other specific restriction 3)	No buffer zone required
<ol> <li>Livestock must be kept out of treated areas for at least 7 days following treatment. IF RAGWORT IS PRESENT, FDLLOW THE GUIDANCE IN THE 'DIRECTIONS FOR USE'.</li> <li>Applications to forage maize and cereal crops must only be made between February 1<sup>st</sup> and June 30<sup>st</sup>.</li> <li>To protect surface water, application to lorage maize must not take place before 10<sup>st</sup> April.</li> <li>Following treatment with Leystar, a period of at least 125 days must be observed prior to the planting of succeeding crops</li> <li>Extreme care must be taken to avoid spray drift onto non-crop plants outside the target area.</li> <li>For auturna planted cereal crops a maximum total dose of 3,75 g of florasulam must be observed for applications made between crop emergence in the year of planting and February 1<sup>st</sup> in the year of harvest.</li> <li>The folla amount of lorasulam applied to a cereal crop must not exceed 7,5 g.</li> <li>In established grassland the maximum individual dose is 2.0 litres product per hectare and the latest time of application is 30<sup>m</sup> Septembe and a minimum interval of 7 days must elapse between application and grazing.</li> <li>In newly sown grassland (less than 12 months old) the maximum individual dose is 1.0 litre product per hectare and the latest time of application is 31<sup>m</sup> August and a minimum interval of 7 days must elapse between application to grassland flore or bedding nor for composing or mulping with 12 months old) the treatment.</li> <li>An interval of 12 months from the treatment date must elapse between the tated if seed (rops), side, hay on haylage.</li> <li>Manuer from animals grazed on LEYSTAR treated grassland must not leave the farm.</li> <li>Manure from animals fed silage, hay or haylage broduced from grassland treated in the previous 12 months must not leave the farm.</li> <li>Manure from animals fed silage, hay or haylage broduced from grassland treated in the previous 12 months must not leave the farm.</li> <li>Manure fr</li></ol>			ps le between crop 30 <sup>th</sup> September ne latest time of bedding nor for ave the farm. composting or	

## 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.

#### WARNINGS

LEYSTAR herbicide has activity against a range of broad-leaved weeds. The ideal timing for application is when the weeds are small and actively growing. The effectiveness of LEYSTAR may be reduced when soils are very dry.

Broad-leaved weeds not present at application will not be controlled.

Avoid overlapping sprav bouts.

DO NOT apply if night temperatures are low, if ground frost is imminent, or in periods of prolonged cold or dry weather. Ensure weeks are actively growing as after periods of prolonged drought, weeds can take a long time to start actively growing again after soil moisture returns

DO NOT apply to crops under stress; stress can be caused by many factors including trost, drought, waterlogging, trace element deficiency, disease and pest attack etc.

Take extreme care to avoid drift onto crops and non-target plants, e.g. trees, shrubs, bedding, outside the target area.

DO NOT apply directly to, or allow spray drift to come into contact with agricultural or horticultural crops, amenity plantings or gardens, ponds, lakes or water courses.

Wash out spray equipment thoroughly (see tank cleaning instructions). Traces of LEYSTAR could cause harm to susceptible crops sprayed later

## GRASSLAND USE NOTES

Grass and weeds must be actively growing to ensure good weed control and minimal check to the grass.

DO NOT roll or harrow grass for 10 days before or 7 days after application.

DO NOT spray in drought, very hot or very cold weather.

Clover will be killed or severely checked by LEYSTAR.

DO NOT spray when grass is wet.

DO NOT USE any plant material treated with LEYSTAR for composting or mulching.

DO NOT USE manure from animals fed on crops treated with LEYSTAR for composting or mulching.

DO NOT USE ON GRASSLAND which will be grazed by horses and ponies.

LEYSTAR must only be applied to established grassland intended for grazing in the calendar year of application. Where silage, hay or havlage is produced from this area in the following calendar year, any plant material treated with LEYSTAR or manure subsequently produced from animals fed on this must stay on the farm. This must only be spread onto agricultural grassland, cereals or maize.

Under no circumstances should this manure be supplied to gardeners or allotment holders, or commercial compost producers i.e. there must be no off-farm sale or supply, as sensitive plants may be affected by residues of LEYSTAR in the manure.

Grass treated with LEYSTAR MUST NOT be cut for hav, havlage or silage within 12 months of treatment.

DO NOT spray grassland where clover or other legumes are a valuable constituent of the sward.

## Grazing Interval

Where ragwort is present users should consult the Code of Practice on How to Prevent the Spread of Ragwort. Ragwort plants sprayed with this herbicide are more palatable and contain higher levels of toxins. Animals should be excluded from treated areas until any ragwort has completely recovered or died and there is no visible sign of the dead weed. Do not include treated ragwort in hay or silage crops.

Livestock must be kept out of treated areas for at least 7 days following treatment. IF RAGWORT IS PRESENT, FOLLOW THE GUIDANCE IN THE 'DIRECTIONS FOR USE.

#### FOLLOWING CROPS (after Forage Maize)

Stubble left in the field after harvest of forage maize sprayed with LEYSTAR may contain residues which could damage certain crops. Do not plant winter beans in the same year as treatment with LEYSTAR.

LEYSTAR residues in plant tissues (including manure and digestate) which have not completely decayed may affect succeeding susceptible crops. If treated crop remains have not fully decayed by the time of planting following crops then avoid planting; peas, beans and other legumes; carrots and other umbellifers; potatoes; lettuce and other compositae; glasshouse and protected crops.

At least 125 days must elapse before planting any of the crops listed below whether after normal harvest or after crop failure.

Crops that can be sown in the same year as a crop treated with LEYSTAR is harvested: Cereals, oilseed rape<sup>1</sup>, grass and vegetable brassicas as transplants.

<sup>1</sup> Vigour reductions may be seen in following crops of oilseed rape after a dry summer. This will be outgrown and will not result in yield loss.

Crops that can be sown in the calendar year following treatment with LEYSTAR: Cereals, oilseed rape, field beans, grass, linseed, peas, sugar beet, potatoes, forage maize, clover (for use in grass/clover mixtures), carrots and vegetable brassicas as transplants.

Straw from cereals sprayed with Leystar may contain residues which could damage certain crops. To avoid such risk bale and cart away the straw.

#### CROP FAILURE

In the event of a crop failure in the spring with LEYSTAR only the following crops may be planted: spring wheat, spring barley, spring oats, forage maize or ryegrass.

## RESISTANCE

LEYSTAR contains active ingredients with differing modes of action and the risk of resistance building is therefore reduced. However, as florasulam is an ALS inhibitor there is a risk of resistance building to this active ingredient and so precautions should be taken to minimise the risk. Therefore, avoid using single action mode of action herbicides, such as ALS inhibitors in the same field over a number of years. Users are advised to apply products containing herbicides with different modes of action or use sequences or tank mixtures where two or more components are active against the target weeds.

## AREA OF USE

LEYSTAR can be applied to established grassland for grazing only, new sown leys, grass for seed, forage maize and winter cereals, spring cereals and cereals undersown with grass.

#### Established grassland for grazing only

#### RATES OF USE, WEED SUSCEPTIBILITY AND MAXIMUM SIZE CONTROLLED

LEYSTAR may be applied to established grassland for grazing only at a maximum dose of 2.0 L/ha from 1<sup>st</sup> February to 30<sup>th</sup> September (see table below).

Application timing is crucial for good control. Applications must be made to weeds that are actively growing before and immediately after application.

If the grass (and hence the weeds) has been grazed, leave for 2 to 3 weeks to allow sufficient re-growth to occur before spraying. It is important that there is sufficient leaf area for the uptake of the herbicide.

Apply LEYSTAR in 150 – 400 litres of water per hectare. Use the higher water volume where weeds are large at the time of application and where the grass is dense.

Do not spray grassland where clover or other legumes are a valuable constituent of the sward.

Weed	Size Controlled	Dose rate (L/Ha)
Curled Dock	Rosette	2.0
Common Daisy	Rosette	1.5
Dandelion	Rosette	1.5
Creeping Buttercup	Rosette	2.0
Great Plantain	Rosette	2.0
Ribwort Plantain	Rosette	2.0

#### New Sown leys and grass for seed

LEYSTAR may be applied to grass seed crops at 1.0 I/ha from the 3 true leaf stage of the crop. Applications must be made between 1<sup>st</sup> February and 30<sup>th</sup> September.

LEYSTAR may be applied at 1.0 litres/ha to grass less than one year old between 1<sup>st</sup> February and 31<sup>st</sup> August. Ensure grass has become established before spraying. Grass sown in the spring or summer may be ready for spraying after about 2 months, but grass sown in late summer or autumn should not be sprayed until growth is resumed in the following spring, perhaps eight months after sowing.

Apply LEYSTAR in 150 - 400 litres of water per hectare.

#### WEED SUSCEPTIBILITY AND MAXIMUM SIZE CONTROLLED

One application of 1.0 L/ha of LEYSTAR will control all susceptible emerged weeds. For optimum performance it is important to check the size of weeds before application.

Maximum weed size controlled
1 true leaf
Moderately susceptible (1 true leaf)
1 true leaf

\* Cleavers which germinate after application will not be controlled

#### Forage Maize

LEYSTAR may be applied when forage maize is between the 3-6 leaf stage and before the crop is over 20 cm tall. Do not apply once the buttress roots (side roots) have started to develop on the first node.

LEYSTAR may be applied to forage maize at a maximum dose rate of dose rate of 1.0 L/ha. One application of 1.0 L/ha of LEYSTAR will control all susceptible emerged weeds. For optimum performance it is important to check the size of weeds before application.

Apply LEYSTAR in 150 - 400 litres of water per hectare.

Weed	Maximum weed size controlled
Cleavers*	1 true leaf
Scented mayweed	1 true leaf

Weed	Maximum weed size controlled
Scentless mayweed	1 true leaf
Creeping thistle	Moderately susceptible (1 true leaf)
Volunteer oilseed rape	1 true leaf
Charlock	1 true leaf

\* Cleavers which germinate after application will not be controlled

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

## WATER VOLUME

For overall application apply LEYSTAR in 150 to 400 litres of water per hectare. For knapsack application apply LEYSTAR in 2 litres of water per 100 m<sup>2</sup>.

#### Cereals and Cereals undersown with Grass

#### CROPS

Leystar can be applied in the spring on all varieties of winter and spring cereals.

## SOIL

Leystar may be used on all soil types.

#### APPLICATION TIMING

## Winter sown cereals (wheat, barley, rye, triticale, spelt), these cereals undersown with grass

LEYSTAR should be applied from the 1st February once the crop has reached 3 leaves (Zadoks 13), up to before the flag leaf sheath extending stage (Zadoks 39 inclusive) and before 30<sup>th</sup> June.

## Spring sown cereals (wheat, barley, rye, Durum wheat), these cereals undersown with grass

LEYSTAR should be applied from the 1<sup>st</sup> February once the crop has reached 3 leaves (Zadoks 13), up to before the flag leaf sheath extending stage (Zadoks 39 inclusive) and before 30<sup>st</sup> June.

#### Winter oats, spring oat, oats undersown with grass

LEYSTAR should be applied from 1<sup>st</sup> February once the crop has reached 3 leaves (Zadoks 13) up to before second node detectable stage (Zadoks 31 inclusive) and before 30<sup>th</sup> June.

#### WEED SUSCEPTIBILITY AND MAXIMUM SIZE CONTROLLED

One application of 1.0 L/ha of LEYSTAR will control all susceptible emerged weeds. For optimum performance it is important to check the size of weeds before application.

Weed	Maximum weed size controlled
Cleavers	120-150 mm
Common chickweed	100 mm
Corn spurrey	2 true leaves
Creeping thistle (from seed)	4 true leaves
Field forget me not	6 true leaves

Weed	Maximum weed size controlled
Scented mayweed	8 true leaves or rosette
Scentless mayweed	Rosette
Shepherd's-purse	4 true leaves
Volunteer oilseed rape	4 true leaves
Wild radish (Runch)	4 true leaves

#### WATER VOLUME

Apply LEYSTAR in 80 to 250 litres of water per hectare. The lower volume must only be used in the open crops on small weeds.

## JOINT APPLICATION IN CEREALS

A joint application is the use of a product in tank mixture or sequence with another product.

TANK MIXTURES: Where tank mixes are used, and unless directed otherwise; the preferred order of addition of products to the spray tank is as follows: water dispersible granules, wettable powders, suspension concentrates (flowables), emulsifiable concentrates, solution concentrates. Each product should be added to the half- full sprayer and be fully dispersed before the addition of the next product.

IMPORTANT NOTE: Joint applications should only be made within the label recommendations of every product in the application.

Only one other product with an ALS inhibitor mode of action may be applied to a cereal crop treated with LEYSTAR. However, a further application of another product containing florasulam may also be made **providing the maximum total dose of florasulam is not exceeded**<sup>1</sup>. Products containing fluroxypyr and/or clopyralid must not be tank mixed with 'LEYSTAR'.

LEYSTAR may be applied in joint application to the same cereal crop with one of the following ALS products:

Alias SX	Harmony SX
Ally Max SX	Hatra
Ally SX	Horus
Answer SX	Omnera <sup>2</sup> LQM
Atlantis OD	Pacifica
Atlantis WG	Palio <sup>1</sup>
Avocet	Parana
Avro SX	Pennant
Barton WG <sup>1</sup>	Pinnacle
Biplay SX	Presite SX
Boxer <sup>1</sup>	Provalia <sup>2</sup> LQM
Broadway Star <sup>1</sup>	Quantum
Calibre SX	Quantum SX
Chekker	Ratio SX
Chimera SX	Refine Max SX
Concert SX	Seduce



Cleancrop Mondial	Simba SX
Dakota <sup>1,2</sup>	Slalom <sup>1, 2</sup>
DP 911 SX	Spitfire <sup>1,2</sup>
Finish SX	Starane XL <sup>1,2</sup>
GF-184 <sup>1,2</sup>	Taxi
Gropper SX	Thor
Hamlet	Traton SX
Harmony M SX	Triad
	Zypar <sup>2</sup>

<sup>1</sup> The maximum total dose of florasulam applied to the crop must not exceed 7.5 g. For autumn planted crops a maximum total dose of 3.75 g of florasulam, must be observed for applications made between crop emergence in the year of planting and February 1<sup>st</sup> in the year of harvest.

<sup>2</sup> Products containing fluroxypyr and/or clopyralid must not be tank mixed with LEYSTAR.

Apart from these specific joint applications LEYSTAR must NOT be applied with any other product containing an ALSinhibitor, for example amidosulfuron.

## APPLICATION EQUIPMENT

LEYSTAR may be applied through tractor-mounted hydraulic sprayers or knapsack sprayers providing they are in good working order and have been calibrated according to the manufacturers' recommendations. Do not apply through CDA applicators.

#### MIXING

Half fill the spray tank with water and add the required amount of LEYSTAR. Fill up the spray tank, agitating continuously to ensure through mixing, and maintain agitation until spraying is complete. Use only clean water for mixing.

## SPRAY QUALITY

Apply LEYSTAR as a MEDIUM spray as defined by the BCPC system.

## TANK CLEANING

To avoid subsequent injury to crops other than cereals, all spraying equipment must be thoroughly cleaned both inside and out, using a proprietary spray cleaner (i.e. All Clear Extra) as follows:

- 1. Immediately after spraying, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
- Rinse inside of tank with clean water and flush through booms and hoses using at least one tenth of the spray tank volume. Drain tank completely.
- 3. Half fill tank with clean water and add All Clear Extra at the recommended rate. Agitate and then briefly flush the booms and hoses with the cleaning solution. Top up with water making sure the tank is completely full and allow to stand for 15 minutes with agitation. Flush the booms and hoses and drain tank completely.
- Nozzles and filters should be removed and cleaned separately with All Clear Extra solution containing 50 ml of All Clear Extra per 10 litres of water.
- Rinse the tank with clean water and flush through the booms and hoses using at least one tenth of the spray tank volume. Drain tank completely.

For disposal of washings, follow The Code of Practice for Using Plant Protection Products. Do not spray onto sensitive crop or land intended for cropping with sensitive crop.

Note: If it is not possible to drain the tank completely, step 3 must be repeated before going onto step 4.

## COMPANY ADVISORY INFORMATION

The following information does not form part of the product label under the UK plant protection products regulations and provides additional advice on product use at the discretion of Corteva Agriscience.

## TRADEMARK ACKNOWLEDGEMENTS

Leystar is a trademark of Corteva Agriscience and its affiliated companies

All other brand names are trademarks of other manufacturers for 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.co.uk/content/dam/dpagco/corteva/eu/gb/en/files/sds/LEYSTAR-SDS.pdf

Alternatively contact your supplier