

IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops	Maximum individual dose (g product/hectare/crop)	Maximum number of treatments per crop	Latest time of application	Aquatic buffer zone to surface water bodies
Winter wheat, Winter rye, Winter triticale, Winter spelt	75	1	Before third node detectable stage (GS 32)	6 m with 3-star DRT

Other specific restrictions:

DO NOT use MEMPHIS on oats and barley.

Applications to be made between September 15th to May 15th.

DO NOT apply via hand-held equipment.

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.

The total amount of halauxifen-methyl applied to a winter cereal crop must not exceed 14.04 g/ha (13.5 g a.e./ha of halauxifen-methyl). For autumn sown crops the maximum total must not exceed 7.8 g/ha (7.5 g a.e./ha of halauxifen-methyl) between first leaf unfolded (GS 11) and 31st December. For any applications involving halauxifen-methyl made between January 1st and flag leaf swollen (GS 45) the maximum total dose of halauxifen-methyl applied must not exceed 6.24 g/ha (6 g a.e./ha). A minimum interval of 3 months between applications of products which contain halauxifen-methyl must be respected.

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.

MEMPHIS

UFI code: Q1N8-G0JV-300G-7Q32



Warning

May cause an allergic skin reaction

Causes serious eye irritation

Very toxic to aquatic life with long lasting effects

Avoid breathing dust.

Wear protective gloves / clothing / eye / 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.

If eye irritation persists: Get medical attention.

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

CORTEVA[™]
agriscience



Memphis[®]

HERBICIDE

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GROUP 4 | 2 HERBICIDES

Product Registration Number: MAPP 20659

A water dispersible granule (WG) formulation containing 69.5 g/kg (66.7 g a.e./kg) of halauxifen-methyl, 250 g/kg of pyroxsulam and 354 g/kg of cloquintocet acid (safener).

A post-emergent herbicide for use on winter cereals (wheat, rye, spelt, triticale) for the control of grass weeds and wide range of 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

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, e-mail: ukhotline@corvea.com

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 product.

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 ANY CONTAMINATION from skin and eyes immediately.

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 to surface water bodies as specified for the crop. HORIZONTAL BOOM SPRAYERS MUST BE FITTED WITH THREE STAR DRIFT REDUCTION 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 30 m 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 1 m 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 5 M 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 three years.

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.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

DO NOT RE-USE CONTAINER for any purpose.

This label is compliant with the CPA

Voluntary Initiative Guidance.



282679 2311 - UNITED KINGDOM

50X20MM MINIMUM
NO TEXT NO COLOR ON THIS ZONE
(THIS SQUARE MUST BE DELETED BEFORE PRINTING)

NET CONTENTS : 375 G e

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**NET CONTENTS : 375 G e****282679 2311 - UNITED KINGDOM**

DIRECTIONS FOR USE

IMPORTANT: This information is authorised 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.

RESTRICTIONS / WARNINGS

Spray preferably in calm weather with no wind or only if the wind speed is less than or equal to 3 on the Beaufort scale (i.e. a maximum of 19 km/hour) and temperature is not exceeding 25 °C in the shade.

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. MEMPHIS can sometimes induce slight and transient (2-3 weeks) crop yellowing. This has no impact on yield.

DO NOT apply to crops under sown with any legume crop (clover etc...) and crops under sown with grass.

MEMPHIS should be applied with an adjuvant (95% w/w oil – rapeseed fatty acid) for the control of meadow and rye brome, ryegrass, wild oats, common poppy and common field speedwell.

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

WEEDS CONTROLLED

MEMPHIS is a post-emergence systemic herbicide for the control of a range of annual grass and broad-leaved weed of winter wheat, winter rye, winter spelt and winter triticale.

MEMPHIS at the recommended rate of 75 g pr/ha with an adjuvant (95% w/w oil – rapeseed fatty acid) offers the following level of control:

Weed Species	Maximum growth stage controlled	Susceptibility
Meadow brome	Apply to actively growing plants up to 4 tillers	S
Rye Brome	Apply to actively growing plants up to 4 tillers	S
Wild Oats	Apply to actively growing plants up to end of tillering	MS
Ryegrass	Apply to actively growing plants up to end of tillering	S
Common Poppy	Apply to actively growing plants up to end of tillering	S
Common Field Speedwell	Apply to actively growing plants up to 6 true leaves	S

Key: S= susceptible, MS: moderately Susceptible

Note: MEMPHIS + adjuvant will only control ALS susceptible grass weed species

At the recommended rate of application of 75 g pr/ha MEMPHIS applied alone without an adjuvant offers the following level of control:

Weed Species	Maximum growth stage controlled	Susceptibility
Loose Silky-bent	Apply to actively growing plants up to end of tillering	S
Red Dead-nettle	Full flowering Up to 18 cm height	S
Cleavers	Up to 15 cm height	S

RESISTANCE MANAGEMENT

Product	Type	Active	HRAC code	Resistance action committee
MEMPHIS	Herbicide	Halauxifen-methyl	4	HRAC
	Herbicide	pyroxsulam	2	HRAC

MEMPHIS contains two active ingredients: halauxifen-methyl and pyroxsulam. Halauxifen-methyl is an arylpicolinate (part of the pyridine carboxylic acid family). Pyroxsulam is a triazolopyrimidine sulfonamide and as an ALS inhibitor there is a risk of resistance building to this active ingredient and so precautions must be taken to minimise the risk.

Use only as part of a resistance management strategy that includes cultural methods of control and does not use ALS inhibitors as the sole chemical method of grass-weed control.

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 AHDB, CropLife UK your distributor, crop adviser or product manufacturer.

Resistance management for grass weeds species

- Do not apply this product to grass weed species with known or suspected resistance to the ALS herbicides.
- 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.
- Good cultural techniques such as ploughing, delayed autumn drilling, use of higher seed rates and competitive cultivars, should be adopted. See local resistance guidelines.
- Use mixtures of herbicides with different modes of action at full-recommended dose rates.
- Apply herbicides at optimum timing and environmental conditions.

Resistance management for broad leaf weed species

- Use recommended label rates to maximise control and minimise seed return.
- In areas where resistance to ALS herbicides has developed to the target species apply MEMPHIS in sequence or mixtures with herbicides with a non-ALS mode of action.
- Apply herbicides at optimum timing and environmental conditions.

Use MEMPHIS as part of an Integrated Crop Management Strategy (ICM) strategy incorporating other methods of control, including where appropriate other herbicides with a different mode of action.

For further advice on resistance management contact your agronomist or advisor and consult the WRAG-UK website.

CROP SPECIFIC INFORMATION

Crops

MEMPHIS may be used on all commercial varieties of winter wheat, winter rye, winter spelt and winter triticale between the growth stages given below.

Time of application

Apply MEMPHIS, in the autumn or spring, from September 15th, from growth stage Zadoks 12 (2 leaves unfolded). A maximum of 1 application can be made up to and including Zadoks 32 (before third node detectable stage) or until May 15th whichever is earlier. Best results will be achieved when target weeds are small and actively growing.

Rate of application

Apply 75 grams of MEMPHIS in 150 to 400 litres of water per hectare, using spray equipment to give good even coverage of the crop. The higher volumes are recommended when the crop is dense. Care should be taken not to overlap spray swaths. MEMPHIS can be applied with an authorised adjuvant (95% w/w oil – rapeseed fatty acid) for the control of meadow and rye brome, ryegrass, wild oats, common poppy and common field speedwell.

Soil type

MEMPHIS can be used to all soil types.

Rainfastness

MEMPHIS is rainfast 1 hour after application providing good drying conditions.

JOINT APPLICATION

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

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

Accurate	Lector
Alias SX	Lorate
Ally Max SX	Mattera ¹
Ally SX	Mozaic SX
Answer SX	Nautius
Avro SX	Nevada
Barton WG	Omnera LQM
Biplay SX	Paramount
Boudha	Parana
Boxer	Pennant
Calibre SX	Pinnacle
Chimera SX	Presite SX
Concert SX	Provalia LQM
Cleancrop Mondial	Quantum SX
Cameo SX	Ratio SX
Counter SX	Refine Max SX
Dakota	Renitar ¹

DP 911 SX	Savvy Premium
Equator SX	Seduce
Ergon	Simba SX
Finish SX	Slalom
Galaxy	Solstice
Gartrel	Spitfire
GF-184	Starane XL
Gropper SX	Suprime
Harmony M SX	Taxi
Harmony SX	Thor
Hiatus	Traton SX
Hunter	Triad
Inka SX	Upton
Jubilee SX	Zypar ¹

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FOLLOWING CROPS

After an application of MEMPHIS at 75g pr/ha up to GS 32 the following crops can be sown:

Autumn: Winter cereals, winter oilseed rape, ryegrass, beans, clover, peas, lucerne, onions, carrot, vetch, phacelia.

Spring: Spring cereals, spring oilseed rape, sunflower, sugar beet, potatoes, grass, clover, beans, peas, maize, carrot, soybean, spinach, sorghum, onions.

Crop failure

In case of cereal crop failure after an application of MEMPHIS the following crops: spring wheat, spring barley, maize and sunflower can be drilled after a minimum interval of 4 weeks. It is important to consider all herbicides used on the treated field before deciding which new crop to sow.

MIXING AND SPRAYING

Mixing

Half fill the spray tank with clean water and start the agitation. SHAKE THE CONTAINER WELL before use and pour in the required amount of product. Rinse any empty containers thoroughly and add rinsings to the spray tank. Add the remainder of the water and continue agitation until spraying is completed. Spray solution MUST be used on the day of mixing and must NOT be left overnight.

Application method

Apply MEMPHIS only with a boom sprayer. Use a spray pressure as low as possible and a boom height adapted to the nozzle type and the sprayed vegetation, while ensuring the good spray distribution. Use nozzles suitable for herbicide applications. Nozzle type does not influence efficacy.

Spray quality

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

Tank cleaning

To avoid subsequent injury to crops other than winter wheat, rye, spelt and triticale, immediately after spraying MEMPHIS, all spraying equipment must be thoroughly cleaned both inside and out using a proprietary tank cleaner such as All Clear Extra at 0.5 % v/v as follows:

1. Immediately after spraying thoroughly and completely rinse all internal surfaces.
2. Rinse inside of tank with clean water and flush through booms and in-line strainers using at least one tenth of the spray tank volume. Drain tank completely.
3. Fill tank with clean water (minimum 10% of tank capacity) and add tank cleaner at the recommended rate and agitate for 15 minutes. Flush the boom and hoses and drain tank completely.
4. Nozzles and filters should be removed and cleaned separately with a tank cleaner at the recommended rate.
5. Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume. Drain tank completely.
6. For disposal of washings, follow Code of Practice for Using Plant Protection Products. Do not spray onto sensitive crop or land intended for cropping with sensitive crop.

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

COMPATIBILITY

When tank mixes are to be used, each product should be added separately to the spray tank, taking due note of any instructions given as to the order of mixing.

Products should only be tank-mixed if each product can be applied with the label recommendations for its use. For further information contact your local Corteva Agriscience distributor.

COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Plant Products Regulations 1995 and provides additional advice on product use at the discretion of Corteva Agriscience

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/MEMPHIS-SDS.pdf>

Alternatively contact your supplier

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