



# **Mattera**<sup>™</sup>

Arvlex<sup>™</sup>active

HERBICIDE

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GROUP 4 2 HERBICIDES

#### Product Registration Number: MAPP No. 19133

An oil dispersion formulation containing 5 g/L florasulam + 6.25 g/L halauxifen-methyl (present as 6 g/L halauxifen-methyl acid) and 6 g/L of cloquintocet-mexyl (safener).

Arvlex™ is the commonly used name of halauxifen-methyl active substance. A post-emergence herbicide for use on a variety of winter cereals (wheat, durum wheat, spelt,

barley, rye, triticale, oats and these crops under sown with grass) and spring cereals (wheat, durum wheat, barley, rye and these crops under sown with grass) for the control of a 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. PROTECT FROM FROST SHAKE WELL BEFORE USE

#### IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops:

Barley, Barley (undersown with grass), Wheat, Wheat (undersown with grass), Rye, Rye (undersown with grass), Triticale (Winter), Triticale (Winter, undersown with grass), Spelt, Spelt (undersown with grass), Durum wheat. Durum Wheat (undersown with grass). Oat (Winter), Oat (Winter, undersown with grass)

Maximum Individual Dose: Maximum Total Dose

Other Specific Restrictions: }

} Full details are given in the Important Latest Time of Application: } Information 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 PROTECTION PRODUCTS.

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# 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

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Crops	Maximum Individual Dose	Maximum Total Dose	Latest Time of Application
Barley, Barley (undersown with grass), Wheat, Wheat (undersown with grass), Rye, Rye (undersown with grass), Triticale (Winter), Triticale (Winter, undersown with grass), Spelt, Spelt (undersown with grass), Durum wheat, Durum wheat (undersown with grass)	1.0 litre product per hectare	1.0 litre product per hectare per crop	June 30th (up to and including GS 45)
Oat (winter), Oat (Winter, undersown with grass).	0.5 litre product per hectare	0.5 litre product per hectare per crop	May 31st (up to and including GS 32)

### Other Specific Restrictions:

One application of MATTERA per season.

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 December 31st. 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.

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 15th in the year of harvest. The total amount of florasulam applied to a cereal crop must not exceed 7.5 g.

Do not apply more than 0.75 litre product per hectare to any crop before February 15th.

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# GENERAL INFORMATION

MATTERA is mainly absorbed through the foliage of the target weeds. The ideal timing is when the weeds are small and actively growing.

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. MATTERA can sometimes induce slight and transient (2-3 weeks) crop vellowing. This has no impact at all to the vield.

When applying MATTERA to spelt, transient growth inhibition and chlorosis may be observed; however, it should have no adverse effect on yield.

DO NOT apply to crops containing or undersown with clover or any legume containing mixtures.

DO NOT roll or harrow 7 days before or after application.

#### WEED RESISTANCE

MATTERA is a product containing Arylex™ (halauxifen-methyl) active substance and florasulam. It also contains a safener (cloquintocet-mexyl). Arylex™ is a member of the arylpicolinate family of synthetic auxins (Group 4, according to HRAC classification) and the risk of resistance developing to this active is low. Florasulam belongs to the triazolopyrimidine (Group 2, according to HRAC classification) and as an ALS inhibitor there is a risk of resistance building to this active ingredient, therefore precautions should be taken to minimize the risk

The following resistance risk strategies are advised:

- Do not rely on a single mode of action.
- 2 Avoid the reneated use of florasulam:
  - a. where resistance to other ALS inhibitors has developed.
  - and to species which are considered high risk species for the ALS herbicides, such as Common Poppy and employ alternation or mixtures with herbicides with another mode of action.
- Follow label recommendations concerning rates and timing of application. Use MATTERA in a way to maximise control of high risk/ difficult to control weed species.
- Consider the use of cultural control and crop rotation to help control
  prevent development of resistance biotypes.

## SOIL

MATTERA may be used on all soil types.

## CROPS

MATTERA can be used on a variety of winter cereals (wheat, durum wheat, spelt, barley, rye, oats and triticale) and spring cereals (wheat, durum wheat, barley and rye) for the control of broad leaf weed species.

MATTERA can be used on a variety of winter cereals (wheat, durum wheat, spelt, barley, rye,triticale and oats) and spring cereals (wheat, durum wheat, barley and rye) under sown with grass for the control of broad leaf weed species.

MATTERA can be used in cereals grown for seed and malting barley.

#### TIMING

#### Winter sown cereals

MATTERA can be applied from September 1st to the following crops; wheat, durum wheat, spelt, barley, rye, triticale (and these crops under sown with grass) from GS 11 (first leaf unfolded) up to GS 45 (flag leaf sheath swollen). The latest calendar date for application is June 30th.

MATTERA can be applied from September 1st when winter oats and winter oats (under sown with grass) is at GS 13 (three leaves unfolded) up to GS 32 (second node detectable). The latest calendar date for application is May 31st.

#### Spring sown cereals

MATTERA can be applied from February 15th when the crop is at GS 13 (three leaves unfolded) up to GS 45 (flag leaf sheath swollen) for all cereal types (except oats), including cereals under sown with grass. The latest calendar date for application is June 30th.

The ideal timing for application is when the weeds are small and actively growing. However, some highly susceptible species can be controlled at advanced growth stages for rescue treatments (e.g. cleavers and red dead-nettle).

#### Undersown cereal crops

MATTERA may be applied to wheat, barley, winter oats, rye, durum wheat, spelt and winter triticale crops undersown with grass. Application should be made when the grasses have started tillering (GS 21) and when weeds are actively growing.

# RATES OF USE, WEED SUSCEPTIBILITY AND MAXIMUM SIZE CONTROLLED

For autumn sown crops the maximum total dose must not exceed 0.75 L/ha when applied from September 1st to February 14st and 1.0 L/ha when applied from February 15st to June 30st.

Application rates and timing for autumn applications (September 1st to February 14th) to winter cereals:

Weed species	Recommended rate L/ha	Timing crop	Maximum growth stage controlled	Susceptibility
Volunteer oilseed rape	0.75	From first leaf unfolded to end of tillering	7 true leaf stage 2-10 cm diameter	s
Cleavers	0.75	From first leaf unfolded to end of tillering	2 true leaf stage 2-6 cm diameter	s
Red dead-nettle	0.5	From first leaf unfolded to end of tillering	2 true leaf stage 2-3 cm diameter	s
Scented mayweed, Scentless mayweed	0.75	From first leaf unfolded to end of tillering	4 side shoots visible 1-25 cm diameter	s

Weed species	Recommended rate L/ha	Timing crop	Maximum growth stage controlled	Susceptibility
Common poppy	0.75	From first leaf unfolded to end of tillering	6 side shoots visible 5 cm diameter	s
Common chickweed	0.75	From first leaf unfolded to end of tillering	3 side shoots visible 1-10 cm diameter	S
lvy-leaved speedwell	0.75	From first leaf unfolded to end of tillering	2 true leaf stage 1-2 cm diameter	S

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Weed species	Recommended rate L/ha	Timing crop	Maximum growth stage controlled	Susceptibility
Volunteer oilseed rape	0.75	From 3 leaves unfolded to second node detectable.	First flowers visible 3-30 cm height	s
Shepherd's purse	0.5	From 3 leaves unfolded to second node detectable.	First flowers visible 4-35 cm height	S
Creeping thistle	1.0	From 3 leaves unfolded to second node detectable.	40 cm height	R
Common fumitory	0.5	From 3 leaves unfolded to second node detectable.	Full flowering 2-22 cm height	S
Common hem <b>p</b> - nettle	1.0	From 3 leaves unfolded to second node detectable.	3-10 cm height	MS
Cleavers	0.75	From 3 leaves unfolded to second node detectable.	First flowers open 11-40 cm height	S
Small-flowered cranesbill	0.5	From 3 leaves unfolded to second node detectable.	12-25 cm diameter	s
Red dead-nettle	0.5	From 3 leaves unfolded to second node detectable.	Full flowering 5-18 cm height	S
Scented mayweed, Scentless mayweed	1.0	From 3 leaves unfolded to second node detectable.	2-12 cm height	s

Weed species	Recommended rate L/ha	Timing crop	Maximum growth stage controlled	Susceptibility
Common poppy	1.0	From 3 leaves unfolded to second node detectable.	10 cm diameter	S
Common chickweed	1.0	From 3 leaves unfolded to second node detectable.	Full flowering 2-25 cm height	S

Application rates and timing for spring applications (February 15th to June 30th) to spring cereals

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Weed species	Recommended rate L/ha	Timing crop	Maximum growth stage controlled	Susceptibility
Fat-hen	1.0	From 3 leaves unfolded to second node detectable.	3-15cm height	S
Cleavers	0.75	From 3 leaves unfolded to second node detectable.	4-20 cm height	s
Common fumitory	0.5	From 3 leaves unfolded to second node detectable.	6 true leaf stage 4-7 cm height	S
Dead-nettles	0.5	From 3 leaves unfolded to second node detectable.	8 true leaf stage 2-10 cm height	S
Scented mayweed, Scentless mayweed	1.0	From 3 leaves unfolded to second node detectable.	4-20 cm height	S
Black bindweed	1.0	From 3 leaves unfolded to second node detectable.	Flower buds visible 3-24 cm height	S
Common chickweed	0.75	From 3 leaves unfolded to second node detectable.	1-15cm diameter	s

Rescue treatment for cleavers to be applied to the crop from third node detectable to flag leaf sheath swollen (winter and spring cereals) and no later than June 30°.

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Weed species	Recommended rate L pr/ha	Timing crop	Maximum growth stage controlled	Susceptibility
Cleavers	1.0	detectable to flag	Beginning of flowering Up to 90 cm	S

For best results apply MATTERA to young weeds which will respond quicker when treated at early stages. Vigorous crop competition enhances control of the difficult to control weeds

#### 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 MATTERA. However a further application of another product containing florasulam may also be made providing the maximum total does of florasulam is not exceeded!

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

of the following ALS pro Alias SX	Hunter¹
Ally Max SX	Inka SX
Ally SX	Jubilee SX
Answer SX	Lorate
Avocet	iodosulfuron-methyl sodium + mesosulfuron-methyl (MAPP 18100)
Avro SX	Diflufenican + iodosulfuron-methyl sodium + mesosulfuron-methyl (MAPP 16149, 17370, 17733)
Barton WG <sup>1</sup>	Mozaic SX
Biplay SX	Nevada <sup>1</sup>
Boudha	Omnera LQM
Boxer <sup>1</sup>	Palio <sup>1</sup>
Broadway Star <sup>1</sup>	Parana
Calibre SX	Pennant
Chimera SX	Pinnacle
Concert SX	Presite SX
Cleancrop Mondial	Provalia LQM
Dakota <sup>1</sup>	Quantum SX
DP911 SX	Ratio SX
Ergon	Refine Max SX
Finish SX	Savvy Premium
Galaxy <sup>1</sup>	Seduce
Gartrel 1	Simba SX
GF-1841	Slalom <sup>1</sup>
Gropper SX	Spitfire <sup>1</sup>
Harmony M SX	Starane XL <sup>1</sup>
Harmony SX	Taxi
Hatra	Traton SX

Hiatus	Triad
Horus	

<sup>&</sup>lt;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 15<sup>th</sup> in the year of harvest.

Apart from these specific joint applications MATTERA must NOT be applied with any other product containing an ALS-inhibitor, for example amidosulfuron.

# WEATHER CONDITIONS

MATTERA can be used in cold or warm (from 2 to 25 °C), humid or dry conditions. In severe drought conditions there can be a slight reduction in efficacy.

#### RAINFASTNESS

MATTERA is rainfast one hour after application.

#### WATER VOLUME

Using standard or low drift nozzles the recommended spray volume is 100 to 400 litres of water per hectare. The lowest water volume should only be used in open crops on small weeds. On later applications where the crop is dense, the spray volume should be increased to 200-400 litres water per hectare. The minimum recommended pressure is 2 to 3 bars.

For undersown cereal crops, it is recommended to use a minimum spray volume of 150 litres of water per hectare.

#### CROP FAILURE

In the event of a crop failure after a crop has been treated with MATTERA, consider all herbicides used on the treated field before deciding which new crop to sow.

#### Autumn applications

In case of a crop failure after an autumn application of MATTERA at 0.75 L/ha, it is possible to sow the following spring crops, with no cultivation restrictions:

- 1 month after application (no cultivation restrictions): Spring wheat, Spring barley, Maize, Ryegrass.
- 3 months after application (after ploughing): Spring Oilseed rape, Field beans, Peas, Sunflower.

#### Spring applications

In case of a crop failure after a spring application of MATTERA at 1.0 L/ha, it is possible to sow:

- 1 month after application (no cultivation restrictions): Spring wheat and Spring barley.
- 2 months after application (after ploughing): Maize.

# **FOLLOWING CROPS**

After an application of MATTERA there are no restrictions for sowing any succeeding crop after the cereal harvest. However, for sensitive species such as soybean, clover, lentils or sunflower ploughing is recommended prior to drilling.

## ADJACENT CROPS

MATTERA is of low volatility and is therefore not subject to vapour drift.

Avoid spray drift onto non-target crops.

Particular care should be taken to avoid spray drift onto susceptible crops e.g. vines, orchards, sunflower, oil seed rape, legumes, vegetable crops, ornamentals, flax, sugar beet, totatoes etc.

DO NOT spray in windy weather 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 a temperature not exceeding 25 °C in the shade.

Apply only with a boom sprayer and use suitable nozzles for herbicides. Use a spray pressure as low as possible and a low height with respect to the treated vegetation, while ensuring the good spray distribution.

The use of low drift nozzles is recommended.

### MIXING

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

# SPRAY QUALITY

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

# 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 halffull sprayer and be fully dispersed before the addition of the next product.

## TANK CLEANING

To avoid subsequent injury to crops other than cereals (wheat, durum wheat, spelt, barley, rye, triticale), all spraying equipment must be thoroughly cleaned both inside and out using All Clear Extra spray cleaner at 0.5 % v/v as follows:

- Immediately after spraying thoroughly and completely rinse all internal surfaces.
- 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.
- 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.

- Nozzles and filters should be removed and cleaned separately with a tank cleaner at the recommended rate.
- 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.
- 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.
  - Note: If it is not possible to drain the tank completely, step 3 must be repeated before going onto step 4.

# 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.

# TRADEMARK ACKNOWLEDGEMENTS

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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 helow:



https://www.corteva.co.uk/content/dam/dpagco/corteva/eu/gb/en/files/sds/MATTERA-SDS.pdf

Alternatively contact your supplier





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#### IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crops: Barley, Barley (undersown with grass), Wheat, Wheat

(undersown with grass). Rve. Rve (undersown with grass). Triticale (Winter), Triticale (Winter, undersown with grass), Spelt, Spelt (undersown with grass), Durum wheat, Durum

Wheat (undersown with grass).

Oat (Winter). Oat (Winter, undersown with grass).

Maximum Individual Dose Maximum Total Dose:

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FOR USING PLANT PROTECTION PRODUCTS.

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