

CLEAVE®

MAPP 16774 PCS 05552

A post-emergence herbicide for use on winter and spring wheat, winter and spring barley, winter and spring oats, winter rye and triticale.

A suspo-emulsion formulation containing 2.5 g/L (0.25% w/w) florasulam and 100 g/L (10% w/w) fluroxypyr (present as 144 g/L fluroxypyr-meptyl). Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic skin reaction.



ADAMA

FOR PROFESSIONAL USE ONLY UFI: U0EC-5DKR-4V0M-NC3N



Scan for Safety Data Sheet or use weblink:
<https://bit.ly/2tk0NkO>

FR R3,4,5 SEP20



Warning

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Very toxic to aquatic life with long lasting effects.

Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic skin reaction.

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Avoid breathing spray.

Wash hands thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

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

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

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTRE or doctor/physician if you feel unwell.

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

If eye irritation persists: get medical advice/attention.

UK only: 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.

Ireland only: Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste. Collect spillage.

Ireland only: To protect aquatic organisms respect an unsprayed buffer zone of 5 m to surface water bodies.

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

MAPP 16774 PCS 05552

5Le

S5034A07

CLEAVE®

**MAPP 16774
PCS 05552**

DIRECTIONS FOR USE:
full instructions in this leaflet.

Batch No.: see packaging

Adama Agricultural Solutions UK Ltd

Third Floor East, 1410 Arlington Business Park, Theale, Reading RG7 4SA
Telephone: +44 (0)1635 860555 | **Technical Helpline:** +44 (0)1635 876622
www.adama.com | ukenquiries@adama.com

For advice on medical emergencies, fires or major spills telephone the UK National Chemical Emergency Centre on +44 (0)1865 407333
UK only - The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

OPEN HERE ►

SAFETY PRECAUTIONS

Operator Protection

UK only: 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.

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

TAKE OFF IMMEDIATELY all contaminated clothing.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

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 farmyards and roads.

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

UK only: DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall 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 ditch which is dry at the time of application. Aim spray away from water.

UK only: 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 HSE'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.

Storage and Disposal

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.

THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way.

KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE

Crops: Winter & spring wheat, winter & spring barley, winter triticale, winter rye, winter & spring oats.

Maximum individual dose (L product/ha)

Maximum total dose (L product/ha/crop)

Latest time of application

Other specific restrictions

Full details are given in the information box within this 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.

BK R3.4.5 SEP20

T5034B07



This leaflet is part of the approved label.

For advice on medical emergencies, fires or major spills telephone
the UK National Chemical Emergency Centre on +44 (0)1865 407333

A post-emergence herbicide for use on winter and spring wheat, winter and spring barley, winter and spring oats, winter rye and triticale.

A suspo-emulsion formulation containing 2.5 g/L (0.25% w/w) florasulam and 100 g/L (10% w/w) fluroxpyr
(present as 144 g/L fluroxpyr-meptyl). Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic skin reaction.

Warning

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Very toxic to aquatic life with long lasting effects.

Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic skin reaction.

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Avoid breathing spray.

Wash hands thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

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

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

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

Call a POISON CENTRE or doctor/physician if you feel unwell.

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

If eye irritation persists: get medical advice/attention.

UK only: 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.

Ireland only: Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

Collect spillage.

Ireland only: To protect aquatic organisms respect an unsprayed buffer zone of 5 m to surface water bodies.

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

MAPP 16774 PCS 05552



IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE

Crop	Maximum individual dose (L product/ha)	Maximum total dose (L product/ha/crop)	Latest time of application
Winter wheat, winter barley, winter triticale and winter rye	1.5	1.5	Up to and including late boot stage - flag leaf sheath swollen (BBCH GS 45)
Spring wheat and spring barley	1.5	1.5	Up to and including flag leaf ligule just visible (BBCH GS 39)
Winter and spring oats	1.5	1.5	Up to and including first node detectable (BBCH GS 31)

Other specific restrictions:

For autumn planted crops a maximum total dose of 3.75 g/ha of florasulam must be observed for applications made between crop emergence in the year of planting and February 1st in the year of harvest.

The total amount of florasulam applied to a cereal crop must not exceed 7.5 g/ha.

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.

SAFETY PRECAUTIONS

Operator Protection

UK only: 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.

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

TAKE OFF IMMEDIATELY all contaminated clothing. **WASH ALL PROTECTIVE CLOTHING** thoroughly after use, especially the insides of gloves.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

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 farmyards and roads.

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

UK only: **DO NOT ALLOW DIRECT SPRAY** from horizontal boom sprayers to fall 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 ditch which is dry at the time of application. Aim spray away from water.

UK only: 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 HSE'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.

Storage and Disposal

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. THIS MATERIAL AND ITS CONTAINER must be disposed of in a safe way.

KEEP OUT OF REACH OF CHILDREN.
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

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.

GENERAL INFORMATION

CLEAVE® is a contact herbicide which is mainly absorbed by the leaves. The optimum timing is to apply CLEAVE when the weeds are small and actively growing.

RESTRICTIONS OR WARNINGS

DO NOT apply when crop is under stress, such as in frosty weather or when frost is expected, insect attack, manganese deficiency, wind damage or where there is possible check from earlier pesticide treatments.

DO NOT overlap spray swaths.

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

Applications of CLEAVE may cause transient symptoms of phytotoxicity.

Crops should not be re-entered until spray residues are dry.

RESISTANCE

CLEAVE contains two active ingredients with different modes of action and therefore the risk of resistance building up is reduced. CLEAVE contains florasulam which acts by inhibition of acetolactate synthase (ALS) and is classified as a group B-Herbicide by the Herbicide Resistance Action Committee (HRAC) and fluroxypyr-meptyl classified as a synthetic auxin and acts like indoleacetic acid within the plants. The Herbicide Resistance Action Committee (HRAC) grouped this mode of action in the international HRAC group O (Synthetic Auxins).

Repeated use of herbicides with the same mode of action can increase the risk of strains of weeds developing resistance to these compounds, leading to poor control. In order to minimise the risk, a strategy for preventing and managing such resistance should be adopted.

Growers are advised to apply products containing herbicides with different modes of action in sequence or tank-mix where two or more components are active against the target weeds.

Use the recommended rate of CLEAVE and the correct application timing for the hardest to control weed species present in the field.

The above should be used in conjunction with effective cropping rotation and cultivation techniques e.g. stale seedbed, cultivation and use of non-selective herbicide prior to drilling.

Control of poppy by CLEAVE is largely due to the florasulam component. Avoid using ALS inhibitors every year in the same field and use in mixtures or sequences with herbicides with a different mode of action which are effective against common poppy. Further guidance on weed resistance management is available from the Herbicide Resistance Action Committee (HRAC) and Weed Resistance Action Group (WRAG). Follow WRAG Guidelines.

WEED CONTROL

For best results apply CLEAVE when weeds are small and actively growing. Weeds emerging after application will not be controlled.

CLEAVE may be applied to all soil types.

Weeds controlled

	Cleave 1.0 L/ha	Cleave 1.5 L/ha
Black-bindweed	S up to 3 leaf stage	-
Cleavers	S up to 4 side shoots	S before flower buds visible
Common chickweed	S up to mid flowering	-
Common poppy	S up to 8 leaf stage	-
Fat-hen	R	R
Field forget-me-not	S up to 8 leaf stage	-
Field pansy	R	R
Field penny-cress	S flower buds visible	-
Fumitory	R	R
Hemp-nettle	S up to 4 leaf stage	-
Mayweeds	S up to 8 leaf stage	S up to beginning of stem elongation of main shoot
Red dead-nettle	R	R
Shepherd's purse	S up to before flower buds visible	-
Speedwells	R	R
Volunteer OSR	S up to 6 leaf stage	-

S = Susceptible R = Resistant

CROP SPECIFIC INFORMATION

CLEAVE may be applied to all varieties of winter and spring wheat, barley, oats and winter rye and triticale.

Winter wheat, barley, rye and triticale

Apply in the spring from the 3 leaf stage of the crop (GS 13) and up to and including late boot stage-flag leaf sheath swollen stage (BBCH GS 45).

Spring wheat and barley

Apply in the spring from the 3 leaf stage of the crop (GS 13) and up to and including flag leaf ligule just visible (BBCH GS 39).

Winter and spring oats

Apply in the spring from the 3 leaf stage of the crop (GS 13) and up to and including first node detectable. (BBCH GS 31).

RATE OF USE AND WATER VOLUME

Apply CLEAVE at 1.0-1.5 L/ha in 200-300 litres water per hectare as a MEDIUM spray (BCPC category).

The lower rate of CLEAVE should only be used on susceptible weed species that are small and actively growing at the time of application. For more details see weed susceptibility table above.

Qualified recommendation: lower water volumes of 100 L/ha may also be used, however these have not been supported by effectiveness or crop safety data. As CLEAVE has contact activity, it is important to achieve a good coverage of the crop when spraying.

FOLLOWING CROPS

Cereals, maize, sugar beet, oilseed rape, grass, carrots, sunflowers and peas may be sown in the calendar year following treatment with CLEAVE. There is no need to plough before drilling the following crop. In the event of crop failure for any reason these crops may also be sown, although vigour reductions in following crops of oilseed rape may be seen after a dry summer. This will be outgrown and will not result in yield loss.

MIXING AND SPRAYING

For use by tractor mounted/trailed sprayer only.

Ensure the sprayer is clean and in good working order. Calibrate according to the sprayer manufacturer's recommendations.

Half-fill the spray tank with clean water and begin agitation. Add the required quantity of CLEAVE to the tank and complete filling. Continue agitation until spraying is complete.

On emptying the container, 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 container safely.

Do not leave the sprayer standing with the spray mixture in it for a long period of time.

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, wetttable 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.

COMPATIBILITY AND SEQUENCES

Joint application

A joint application refers to use of one product in tank-mixture or sequence with a second product.

CLEAVE can be applied to a cereal crop in joint application with one of the following alternative ALS-inhibitor products (in the Republic of Ireland only products marked with a #). Only one other ALS-inhibitor product can be applied to a cereal crop also treated with CLEAVE. In addition, the maximum total dose of florasulam (see 'other specific restrictions'), taking into consideration the contributions from both applied products, must not be exceeded. Where the product is marked* the product may be applied in a joint application with CLEAVE either as a convenience tank-mix partner or in sequence. Otherwise, the joint application with CLEAVE can only be made in sequence and not in tank-mix.

Absolute*	Harmony M SX #	Parana
Alias SX*	Hatra*	Pennant
Ally Max SX* #	Headland Sure-fire Gold	Presite SX #
Answer SX*	Hiker	Ratio SX
Atlantis WG*	Horus	Refine Max SX
Avro SX	Hunter	Reprisal*
Biplay SX* #	Hussar #	Savvy Premium*
Barton WG	Inka SX*	Seduce
Boxer #	Jubilee SX*	Simba SX*
Bullion*	Lexus Class	Slalom
Calibre SX #	Lexus Millenium	Snicket*
Chimera SX	Lexus SX*	Spitfire* #
Concert SX	Lorate* #	Staka SX*
Ductis SX*	Metmeth 200*	Standon Mesto XT*
Exceed SX*	Metro Clear*	Standon Mexxon Xtra*
Finish SX #	Mozaic SX	Starane Gold*
Firecrest*	Octavian	Starane Vantage
Forge*	Oklar SX*	Thor #
Galaxy* #	Oriel 50 SX*	Traton SX*
GF-184	Othello*	Triad #
Goldron-M*	Pacifica* #	

Always read the label of the partner product carefully before use in a joint application. All joint applications must be made within the label recommendations of both products.

Apart from the products listed above, CLEAVE must not be used in sequence or in mixture with any other product containing an ALS inhibitor.

For information on additional non-ALS inhibitor tank-mixes, consult your supplier.

Ireland only: For information on tank mixes, consult Adama Agricultural Solutions UK Ltd, your agronomist or your distributor.

SPRAY TANK CLEANING

To avoid subsequent damage to crops other than cereals immediately after spraying thoroughly clean all spray equipment including inside and outside of the lid using ALL CLEAR EXTRA™ sprayer cleaner according to the following label instructions.

1. Immediately after spraying, drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. Rinse inside of tank with clean water and flush through boom 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 flush the boom 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. Again flush the boom and hoses and drain tank completely.
4. Nozzles and filters should be removed and cleaned separately with an ALL CLEAR EXTRA solution containing 50 ml of ALL CLEAR EXTRA per 10 litres of water.
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. Dispose of washings safely follow the 'Code of Practice for Using Plant Protection Products' (DEFRA Publications, 2006). Do not spray onto sensitive crop or land intended for cropping with sensitive crops.

DISCLAIMER/CONDITIONS OF SUPPLY

The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products. We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.

Authorised and marketed by:

Adama Agricultural Solutions UK Ltd
Third Floor East, 1410 Arlington Business Park
Theale, Reading RG7 4SA
Telephone: 01635 860 555
Technical Helpline: 01635 876 622
www.adama.com
Email: ukenquiries@adama.com

CLEAVE® is a registered trademark of a company of the Adama Group.
© Adama Agricultural Solutions UK Ltd

Other brand names referred to on this label are trademarks of other manufacturers in which proprietary rights may exist.