

# MINSTREL®

## HERBICIDE

An emulsifiable concentrate containing 200 g/l fluroxypyr (equivalent to 28.6% w/w fluroxypyr-1-methylheptyl ester with an aromatic hydrocarbon).

For the control of certain annual weeds in the listed cereals, maize and grassland.

**FOR PROFESSIONAL USE ONLY**

**Flammable liquid and vapour**

May be fatal if swallowed and enters airways.

Causes serious eye irritation.

May cause respiratory irritation.

May cause drowsiness or dizziness.

**Very toxic to aquatic life with long lasting effects.**

Keep away from heat/sparks/open flames/hot surfaces.

Avoid breathing fume/gas/mist/vapours/spray.

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

IF SWALLOWED: Rinse mouth. Do not induce vomiting.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 advice/attention.

Collect spillage. Hazardous to the aquatic environment.

Store in a well ventilated place. Keep container tightly closed.

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.

Repeated exposure may cause skin dryness and cracking.

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

**PCS 04782**

UFI: KPDR-00FH-TVKY-C7XR

**DANGER**



**5 L**



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## DIRECTIONS FOR USE

Crop	Maximum individual dose (L/product/ha)	Maximum total dose (L/product/ha)	Latest time of application
Spring wheat, spring barley	0.75	0.75	Flag leaf ligule just visible (GS39)
Winter wheat, winter barley	1.0	1.0	Flag leaf ligule just visible (GS39)
Winter rye, winter oats, triticale	1.0	1.0	Before second node detectable stage (GS32)
Spring oats	0.75	0.75	Before second node detectable stage (GS32)
Forage maize	1.0	1.0	Before 7 leaves unfolded (GS17)
Grassland (established)	2.0	2.0	7 days livestock exclusion
Grassland (new leys)	0.75	0.75	7 days livestock exclusion

### Other specific restrictions:

A maximum total dose of 0.75 litres per hectare must be observed for applications made to cereals between crop emergence in the year of planting and 1st February in the year of harvest.

When the product is applied as a spot treatment to permanent grassland and rotational grass, the maximum concentration must not exceed 30ml product per 10 litres water.

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

### CONDITIONS OF APPLICATION

Cereals: Avoid spraying during periods of prolonged cold (temperatures below 10°C).

Maize: Avoid spraying during periods where night temperatures are below 5°C.

### SPECIFIC RECOMMENDATIONS

**WARNING:** Danger to neighbouring broadleaved crops. Avoid spraying near broadleaved crops in windy conditions.

Use as low a spray pressure as possible and the lowest boom height possible, whilst ensuring an even spray.

Do not apply when temperatures exceed 25°C in the shade.

Do not apply MINSTREL if the field is undersown with legumes or legume containing mixes.

Do not roll or harrow either one week pre or post treatment.

Treat only vigorous, healthy crops growing under good soil and weather conditions.

Do not treat diseased crops or those suffering pest attack.

Do not treat crops suffering herbicide damage, drought, waterlogging, other stress.

Cereals undersown with grasses may be treated provided that the grasses are tillering.

### SPRAY MIXING

Half fill the spray tank with water. Pour the required volume of MINSTREL into the spray tank, then top up with the required amount of water. Stir continuously. Spray volume from 200 to 400l/ha. Use equipment that is clean and in good working order. Avoid overlapping spray swaths. Spray should be applied as a MEDIUM spray (BCPC definition).

### PRECAUTIONS

Flash point: 55°C

Freezing point: <-5°C

Keep in original container.

Do not re-use container. The empty container must be sent for disposal as hazardous waste.

Unused product should be disposed of as hazardous waste, in compliance with local and national legislation.

When using the product thoroughly empty and rinse the product container, pouring the rinse water into the spray tank.

Clean sprayer and tank thoroughly after use with a wetting agent.

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## MODE OF ACTION

Fluroxypyr, the active ingredient of MINSTREL, belongs to the family of synthetic auxin herbicides. Repeated use of preparations containing substances with the same mode of action may lead to the emergence of resistant strains. To reduce the risk of occurrence of this phenomenon, it is advisable to avoid the repeated use of products with the same mode of action and alternate applications of products with different modes of action, both on one crop and in rotation of crops.

## RATE AND TIME OF APPLICATION AND TARGET WEEDS

For optimum efficacy application of MINSTREL to weeds should be when the weeds are actively growing.

Crop	Timing	Dose	Weed susceptibility
Winter barley, winter wheat	From the crop having 2 leaves (GS12) until the fully tillered stage (GS29). Do not treat crops once they have passed the fully tillered stage (GS29) wait until after the 1st March.	0.75 l/ha	Cleavers (to 5 cm) Common chickweed (to 5 cm)
	After 1st March from the crop having 2 leaves (GS12) until the flag leaf stage: flag leaf fully unrolled, ligule just visible stage.	1.0 l/ha	Black bindweed (to 6 leaves) Cleavers (to flowering stage) Common chickweed (to flowering stage) Forget-me-not (to flowering stage) Hempnettle (to flowering stage) Knotgrass (to 2 leaves) Red dead-nettle (to 4 leaves)
Triticale, winter oats, winter rye	In spring (after 1st March) from the crop having 2 leaves unfolded to before the 2nd node is detectable.	1.0 l/ha	Black bindweed (to 6 leaves) Cleavers (to flowering stage) Common chickweed (to flowering stage) Forget-me-not (to flowering stage) Hempnettle (to flowering stage) Knotgrass (to 2 leaves) Red dead-nettle (to 4 leaves)
Spring barley, spring wheat	From the crop having 2 leaves unfolded to flag leaf stage: flag leaf fully unrolled, ligule just visible stage	0.75 l/ha	Black bindweed (to 4 leaves) Cleavers (to 10 cm) Common chickweed (to 10 cm) Forget-me-not (to 5 cm) Hempnettle (to 10 cm) Knotgrass (to 2 leaves)
Spring oats	From the crop having 2 leaves unfolded to before the 2nd node is detectable.	0.75 l/ha	Black bindweed (to 4 leaves) Cleavers (to 10 cm) Common chickweed (to 10 cm) Forget-me-not (to 5 cm) Hempnettle (to 10 cm) Knotgrass (to 2 leaves)

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Crop	Timing	Dose	Weed susceptibility
Forage maize	Between the crop having 3 and 6 leaves unfolded, inclusive. Treat before the buttress roots start to develop.	1.0 l/ha	Black bindweed (to 4 leaves) Cleavers (to 10 cm) Common chickweed (to 10 cm) Forget-me-not (to 5 cm) Hempnettle (to 10 cm) Knotgrass (to 2 leaves) Black nightshade (to 4 leaves)
Grassland (newly sown leys) Important: any clovers will be killed	Susceptible annual weeds In autumn or spring. From the grasses having at least 3 expanded leaves.	0.75 /ha	Common chickweed to 5 cm
Established Grassland (permanent and rotational) Important: any clovers will be killed	Control of Dock spp. Cut the docks before seeding, normally late-May to early-June. Spray the regrowth 2-3 weeks after cutting. A repeat treatment may be required in the following year if the docks are well-established or numerous. When making spot treatments, spray to just wet the dock leaves without run-off.	2 l/ha (or 30ml Minstrel per 10 litres water spot treatment)	Broad-leaved dock Curled-leaved dock – both at the rosette stage before flowering

## Crop failure

In the event of a cereal or grass 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 Minstrel.

## Compatibility

For information on tank mixes consult the UPL website – [upleurope.com](http://upleurope.com)

## 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 of the weather conditions before, during and 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, and no responsibility will be accepted by us or resellers 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.

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