

# BINDER

A selective post-emergence herbicide for use on winter and spring cereals, forage maize and grassland to control a range of perennial and annual weeds, including cleavers, common chickweed, field forger-me-not, common hemp-nettle, black bindweed, volunteer potatoes, docks and common nettle

An emulsifiable concentrate containing 200 g/lite fluoroxypyr (20.4% w/w) as the 1-methyl heptyl ester

## RISK AND SAFETY INFORMATION

### DANGER

May be fatal if swallowed and enters airways  
Causes skin irritation  
Causes serious eye irritation  
May cause drowsiness or dizziness

Very toxic to aquatic life with long lasting effects

Wear protective gloves, eye protection, face protection  
IF ON SKIN: Wash with plenty of soap and water  
IF SWALLOWED: immediately call a POISON CENTER or doctor/physician

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

Continue rinsing

Do NOT induce vomiting

Dispose of contents/container in accordance with national regulations

Do not contaminate water with the product or its container.

Repeated exposure may cause skin dryness or cracking

To avoid risks to human health and the environment, comply with the instructions for use on this container or label.

## IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

Crop	Maximum individual dose	Maximum total (litres product/ha/crop)	Latest time of application
Winter wheat and winter barley	2 L/ha	2 L/ha (*)	Before flag sheath opening stage (up to Zadoks 45 inclusive)
Winter oats, rye, triticale, durum wheat	1 L/ha	1 L/ha (*)	Before second node detectable stage (up to Zadoks 31 inclusive)
Spring wheat and spring barley	0.75 L/ha	0.75 L/ha	Before flag leaf sheath extending stage (up to Zadoks 39 inclusive)
Spring oats	0.75 L/ha	0.75 L/ha	Before second node detectable stage (up to Zadoks 31 inclusive)
Forage maize	1 L/ha	1 L/ha	Before seven leaves unfolded stage
Grassland	2 L/ha	2 L/ha	(*)

(\*) see also other specific restrictions

### Other Specific restrictions:

A maximum total dose of 0.75 L/ha 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, rotational grassland and newly sown leys, the maximum concentration must not exceed 30 ml product per 10L water.

Livestock must be kept out of treated areas for at least three days after treatment and until poisonous weeds such as ragwort have died and become unpalatable.

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE.**

PCS No 5113



# DHM Agrochemicals

## SAFETY PRECAUTIONS

### OPERATOR PROTECTION

Engineering control of operator exposure must be used where reasonably practical in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS),  
SUITABLE GLOVES AND FACE PROTECTION (FACE  
SHIELD) when handling the concentrate.

WASH CONCENTRATE from skin or eyes immediately.  
WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

WHEN USING, DO NOT DRINK, EAT OR SMOKE.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY with plenty of water and seek medical attention.

IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).

### ENVIRONMENTAL PROTECTION

Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads.

KEEP LIVESTOCK out of treated areas for at least 3 days and until poisonous weeds such as ragwort have died and become unpalatable.

**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.

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFF.

DO NOT RE-USE CONTAINER for any purpose.

### 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.

### MIXING AND SPRAYING

The rate of use of BINDER is dependent on the weed, the size of weed and the tank-mix used as detailed below. Using standard nozzles the recommended spray volume is 150 to 400 litres water per hectare. The lowest volume should only be used in very open crops and small weeds. On later applications where the crop is dense the spray volume should be increased to 400 litres water per hectare. The minimum recommended pressure is 2 to 3 bars. Apply BINDER as a MEDIUM spray as defined by the BCPC system.

Add the appropriate amount of BINDER to clean water in a half-filled sprayer tank, mix thoroughly and add the remainder of the water. The spray mix must be used immediately and agitated continuously during mixing and until application is complete.

### CROP SPECIFIC INFORMATION

BINDER is a translocated herbicide taken up by the leaves of weeds. It is essential that the target weeds have fully emerged before application and that good spray of the weed foliage is achieved. Weeds which emerge after application are not controlled.

Best results are achieved against small weeds growing actively under warm, moist conditions. These conditions are particularly important for the control of cleavers. Ensure that crops are vigorous with growth unaffected by frost, pests, disease, nutrient deficiency or moisture stress before treatment. Do not treat waterlogged crops or crops under drought stress.

### CEREALS AND FORAGE MAIZE

Spray treatments (from 1<sup>st</sup> March onwards on winter crops)

Crop	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Winter Wheat Winter Barley	Apply from the 2 leaf stage (Zadoks 12) until before flag leaf opening stage (Zadoks 45)	1.0	Cleavers (flowering) Common Chickweed (flowering) Common hemp-nettle (flowering) Black Bindweed (6 leaves) Red dead-nettle (4 leaves)
Winter Oats Winter Rye Durum Wheat Triticale*	Apply from the 2 leaf stage (Zadoks 12) until before the second node detectable stage (Zadoks 31)	1.0	Knitgrass (2 leaves) Common Fumitory (2 leaves) Groundsel (checked at 2 leaves) Mayweeds (checked at 2 leaves) Redshank (checked at 2 leaves) Common field-speedwell (checked at 2 leaves) Ivy-leaved Speedwell (checked at 2 leaves)

Crop	Timing of Application	Rate L/ha	Weeds Controlled & Maximum Growth Stage for Control
Spring Wheat Spring Barley	Apply from the 2 leaf stage (Zadoks 12) until before flag leaf sheath extending stage.	0.75	Cleavers (10 cm) Common Chickweed (10 cm) Common hemp-nettle (10 cm) Black Bindweed (4 leaves)
Spring Oats	Apply from the 2 leaf stage (Zadoks 12) until before second node detectable stage.	0.75	Knitgrass (2 leaves) Common Fumitory (2 leaves) Groundsel (checked at 2 leaves) Mayweeds (checked at 2 leaves) Redshank (checked at 2 leaves) Common field-speedwell (checked at 2 leaves) Ivy-leaved Speedwell (checked at 2 leaves)
Forage maize**	From 3-6 leaves unfolded and before the crop is 20 cm high and before any buttress roots start to develop at the first node.	1	Black nightshade (cotyledons up to 6 true leaves), use 200-300 L water

\* Do not tank-mix with any herbicide for use on triticale.

\*\* DO NOT apply to forage maize beyond the recommended growth stages or once buttress roots have formed. Do not apply in tank-mix with any other product. Avoid boom overlap.

### Two-way mixtures with other broad-leaved weedkillers.

BINDER is also compatible in two-way mixture with approved salt formulations of MCPA. Refer to the product label for weed susceptibilities, timing of application, etc. For this mixture. The addition of the recommended rate of approved salt formulations of MCPA to BINDER is recommended where weeds such as common poppy, fat-hen and shepherd's-purse are present.

The timing of application of BINDER mixtures depends on the tank-mix partner but mixtures should not be applied after the first node detectable stage (Zadoks 31).

### VOLUNTEER POTATO CONTROL (winter wheat and winter barley only)

#### Timing - cereal crop stage

Apply 2.0 litres of BINDER any time from the third node detectable stage of crop growth up to and including the flag leaf figure just visible stage (Zadoks 33 to 39 inclusive) in 300 to 400 litres water per hectare using standard nozzles.

#### Weed control stage

Potato shoots from 10 cm up to 40 cm in height.

#### Notes

BINDER will only affect shoots which have emerged at the time of spraying. BINDER will not give complete control of top growth.

However, a good degree of stunting can be expected, which will reduce the competitive threat to these crops by the weed. Because volunteer potatoes can emerge over an extended period, sprays applied later in the recommended period will generally give better results. The main factors for obtaining successful results are that there is sufficiently active growing green foliage on the potatoes and that good coverage of this foliage is achieved, for example by use of sufficiently high water volumes. In addition to the control of volunteer potato haulm this use of BINDER will give a useful reduction in the viability of daughter tubers.

#### Warnings

These warnings apply only for this high rate recommendation 2.0 litres/ha for BINDER. They do not apply where the standard rates for annual broad-leaved weed control (0.5 to 1.0 litres/ha). Avoid overlapping spray bouts.

Straw from cereals treated at these rates and timings with BINDER may contain residues which could damage certain crops. Straw must not be incorporated back into the soil. When straw is disposed of by baling and carting it should be used only for animal bedding. Manure from this animal bedding should only be used on or before cereal or grass crops.

DO NOT PLANT WINTER BEANS or legumes in the same year as this treatment with BINDER. DO NOT PLANT PEAS or other legumes in the spring following the treatment.

DO NOT TANK-MIX BINDER WITH ANY OTHER PRODUCT when used as recommended above.

### GRASSLAND

Newly sown and established grass leys and permanent pasture may be treated with BINDER for the control of annual and perennial broad-leaved weeds when weeds are actively growing. Do not spray swards containing clovers or other legumes if there are important constituents of the sward.

### Annual weeds - newly sown grass leys

Application of BINDER at 0.75 litres/ha in a spray volume of 200 to 400 litres of water per hectare to give good coverage of the weeds will control common chickweed up to 50 mm.

Grasses should have at least 3 fully expanded leaves.

### Perennial weeds - established grassland

Apply BINDER at 2.0 litres/ha in a spray volume of 300 to 400 litres of water per hectare to give good coverage of the weeds.

WEEDS	Rate of use L/ha	Optimum timing of application
Common nettle	2.0	Spray when actively growing but before flowering (normally up to mid-June). A reduction in top growth only can be expected.
Dandelion	2.0	Spray when actively growing but before flowering (normally up to mid-June).
Dock (curled and broad leaved)	2.0	Treat in the Spring when the docks are at the rosette stage (broad-leaved) 15 to 20 cm high. If the grass has been cut for hay or silage or grazed over winter, leave for 2 to 3 weeks to allow sufficient re-growth to occur before spraying. On large well established docks, or where there is high reservoir of seed in the soil, a second dose the following year may be required.

### COMPATIBILITY

BINDER should be applied in tank-mix with other products only if any requirements or restrictions on the other product label do not conflict with the requirements or restrictions for BINDER. Tank-mixes should not be allowed to stand in the tank and agitation should be maintained at all times.

Crops, timings, etc, can be affected by the rate and type of tank-mix partner used, always refer to the product label of the tank-mix partner.

Mix BINDER in the spray tank first when mixing with water dispersible granules, wettable powders or suspension concentrates (flowables). Each product should be added to the half-full sprayer tank and be fully dispersed before the addition of the next product. BINDER can be tank-mixed with a number of other herbicides to broaden the spectrum of weeds controlled. These other herbicides may have crop, timing, varietal and other restrictions which are different to those of BINDER. Tank-mixes should only be applied within label recommendations of every product in the mix.

For more information on possible tank mixtures, contact your distributor.

### NOTES

Apply to dry foliage.

For best results apply BINDER when weeds are actively growing. In newly-sown crops, seedling and small weeds are more susceptible to BINDER and will respond quickly when treated at this stage. Vigorous crop competition enhances control of the more resistant weeds and prevents weeds which germinate after application from becoming a problem in the crop.

Crops undersown with grass may be sprayed provided the grasses are tillering. Do not apply to crops undersown with clover or other legume-containing mixtures.

Keep livestock out of treated areas for at least 3 days and until poisonous weeds such as ragwort have died and become unpalatable.

BINDER will only produce optimum results when the weeds are actively growing and the crop competitive. This is particularly important with cleavers.

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

Do not spray in windy weather and avoid drift onto non-target crops/areas.

Do not treat crops under stress. Stress can be caused by many factors including frost, drought, waterlogging, trace element deficiency, disease and pest attack etc.

Do not spray if night temperatures are low or if frost is imminent.

BINDER used alone is rainfast one hour after application.

Do not roll or harrow 7 days before or after treatment.

Wash equipment thoroughly with water and detergent immediately after use.

Traces of BINDER can cause harm to susceptible crops sprayed later.

Approval holder  
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**Contents: Batch No: see bottle**  
**1 litre For professional use only**



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