



CLOVERMASTER

MAPP 18251

A soluble concentrate formulation containing 400 g/l (29.8% w/w) 2,4-DB as the sodium salt for the control of broad-leaved weeds in Cereals, Grassland, Lucerne and Clover

The Control of Substances Hazardous to Health Regulations (COSHH) may apply to the use of this product at work.

Pack size: 1-20 L

Batch No.: XXXXX

**PROTECT FROM FROST
FOR PROFESSIONAL USE ONLY**

Nufarm UK Limited
Wyke Lane, Wyke,
Bradford,
West Yorkshire,
BD12 9EJ
United Kingdom

Technical Helpline telephone number 01274 694714
24-hour emergency telephone number 01274 696603

CloverMasterUKIRL/0418



DANGER

Harmful if swallowed.
Causes serious eye damage.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

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

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

IF SWALLOWED: Call a POISON CENTER, or doctor/physician if you feel unwell.

Rinse mouth.

Dispose of contents/container to a licensed waste disposal contractor or collection site except for empty triple rinsed 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

**IMPORTANT INFORMATION
FOR USE ONLY AS A PROFESSIONAL HERBICIDE**

Crop	Maximum Individual Dose	Maximum Number of Treatments	Latest Time of Application
Wheat, Barley and Oats (winter)	4.5 l/ha	1 per crop	Before the first node detectable
Wheat (undersown with grass, lucerne, red and white clover, sainfoin or vetch), barley (undersown with grass, lucerne, red and white clover, sainfoin or vetch) and oats (undersown with grass, lucerne, red and white clover, sainfoin or vetch)	4.5 l/ha	1 per crop	Before the first node detectable
Oats (spring)	4.25 l/ha	1 per crop	Before the first node detectable
Grassland	4.5 l/ha	1 per annum	-----
Lucerne, Red Clover and White Clover	4.5 l/ha	1 per annum	Fourth trifoliolate leaf stage

Other specific restrictions:

Livestock must be kept out of treated areas for at least 2 weeks following treatment. If ragwort is present, the guidance in the 'DIRECTIONS FOR USE' must be followed.

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

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.

WEAR SUITABLE PROTECTIVE GLOVES during application.

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

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

WASH CONCENTRATE from skin or eyes immediately.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before meals and after work.

Environmental Protection

Do not contaminate water with product or its container (do not clean application equipment near surface water /avoid contamination via drains from farmyards and roads)

Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

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.

STORE AWAY FROM FROST

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.

RESTRICTIONS

- DO NOT sow any crop into soil treated with CLOVERMASTER for at least 3 months after application.
- DO NOT roll, harrow or cut crops within seven days before or after spraying.
- DO NOT graze crops within a week before or 2 weeks after spraying.
- DO NOT apply during cold weather or drought.
- DO NOT apply during rain or if rain is expected.
- DO NOT spray in windy weather and avoid drift onto broad-leaved plants outside the target area. CLOVERMASTER is active at low concentrations. The following crops are particularly susceptible to spray drift: beet, brassicae (eg turnips, swedes, oilseed rape) and most market garden crops including lettuce and tomatoes under glass, pears and vines.
- DO NOT use CLOVERMASTER immediately before or after sowing any crop.

WEEDS CONTROLLED

CLOVERMASTER is a selective herbicide for use post-emergence to control broad-leaved weeds in Cereals, Grassland, Lucerne, and Clover

CLOVERMASTER applied at 4.5 l/ha will control those annual weeds as listed and will control perennial weeds as indicated.

Annual weeds will be best controlled if spraying is done while the majority of weeds are seedlings.

Perennial weeds should be sprayed during their period of maximum growth, usually when the flower buds are beginning to form. The response of perennial weeds to treatments are often variable with only the aerial parts killed, though often suppression will occur. The recovery of weeds will be reduced if the sward is growing vigorously at the time of treatment.

Annual Weeds

Annual weeds will be best controlled if spraying is done while the majority of weeds are seedlings.

Susceptible

Complete or almost complete control of seedlings*

Corn Buttercup	<i>Ranunculus arvensis</i>
Fat Hen	<i>Chenopodium album</i>
Field Pennycress	<i>Thlaspi arvense</i>
Shepherds Purse	<i>Capsella bursa pastoris</i>

Moderately Susceptible

Effective control of seedlings* but not necessarily complete control

Black Mustard	<i>Brassica niara</i>
Charlock	<i>Sinapis arvensis</i>
Common Fumitory	<i>Fumaria officinalis</i>
Common Orache	<i>Atriplex patula</i>
Common Poppy	<i>Papaver rhoeas</i>
Flixweed	<i>Descurainia sophia</i>
Knotgrass	<i>Polvaonum aviculare</i>
Pale Persicaria	<i>Polvaonum lapathifolium</i>
Prickly Sow Thistle	<i>Sonchus asper</i>
Redshank	<i>Polvaonum persicaria</i>
Small Nettle	<i>Urtica urens</i>
Smooth Sow	<i>Sonchus oleraceus</i>
Treacle Mustard	<i>Ervimum cheiranthoides</i>
Wild Turnip	<i>Brassica rapa</i>

Moderately Resistant

Temporary suppression of seedlings*, long term control dependant on crop competition and weather.

Black Bindweed	<i>Polvaonum coconvolvulus</i>
Doves Foot	<i>Geranium molle</i>
Groundsel	<i>Senecio vulaaris</i>
Scarlet Pimpernel	<i>Anaadalis arvensis</i>
White Mustard	<i>Sinapis alba</i>

Resistant

No useful effect

Fools parsley	<i>Aethusa cynapium</i>
Chickweed	<i>Stelaria media</i>
Red dead nettle	<i>Lamium purpureum</i>
Speedwells	<i>Veronica spp</i>

Perennial Weeds

The following perennial weed species will be controlled as indicated.

Common Name	Species Name	Seedlings*	Shoots*	Long Term*
Autumn Hawkbit	<i>Leontodon autumnalis</i>	MS	MS	-
Broadleaved Dock	<i>Rumex obtusifolia</i>	S	MR	R
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	S	MS	R
Common Ragwort	<i>Senecio jacobaea</i>	R	R	R
Creeping Buttercup	<i>Ranunculus repens</i>	S	S	MS
Creeping Thistle	<i>Cirsium arvense</i>	S	MS	MR
Crowfoot	<i>Ranunculus acris</i>	MS	MS	MR
Curled Dock	<i>Rumex crispus</i>	S	MS	MR
Dandelion	<i>Taraxacum officinale</i>	MR	MR	MR
Field Bindweed	<i>Convolvulus arvense</i>	MS	MS	R
Horsetail	<i>Equisetum spp</i>	MS	MS	R
Plantain	<i>Plantago spp</i>	S	S	S
Perennial Sow Thistle	<i>Sonchus arvensis</i>	MR	MR	MR
Spear Thistle	<i>Cirsium vulgare</i>	S	MS	MS

S	Susceptible	Complete or near complete kill.
MS	Moderately Susceptible	Good control if attention is given to good timing.

MR	Moderately Resistant	Variable effect, useful control cannot be relied on
R	Resistant	No useful effect
-	Insufficient Data	

- * 'Seedlings' are young weed plants with a maximum of two expanded true leaves.
- * 'Shoots' refers to the stage between 3 expanded true leaves and early flower bud of the weed.
- * 'Long term' refers to the sustained response expected in established weeds as a result of effects on both shoot and root.

Where ragwort is present users should consult the Code of Practice on How to Prevent the Spread of Ragwort. Ragwort plants sprayed with this herbicide are more palatable and contain higher levels of toxins. Animals should be excluded from treated areas until any ragwort has completely recovered or died and there is no visible sign of the dead weed. Do not include treated ragwort in hay or silage crops.

WEED RESISTANCE

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered to be resistant to a herbicide if it survives a correctly applied treatment at the recommended dose. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

CROP SPECIFIC INFORMATION

CEREALS

CLOVERMASTER may be used on all commercial varieties of Winter and Spring sown Wheat, Barley and Oats, but is not recommended for use on Rye.

CLOVERMASTER may also be used on cereals undersown with Grass, Red or White Clover, or Lucerne.

Water Volume: Apply in 200 to 400 litres of water per hectare.

Use a minimum rate of 225 l/ha in dense stands of cereals, or if weed growth is dense.

Spray quality: Apply as a medium quality spray (as defined by BCPC). A spray pressure of 2-3 bar is recommended.

Timing of application: CLOVERMASTER should be applied when the crop is actively growing and is at the correct growth stage.

The best results will be obtained if spraying is done while the majority of weeds are seedlings.

Winter Wheat, Barley and Oats

Apply CLOVERMASTER at a rate of 4.5 l/ha

Apply in the spring from the leaf sheath erect stage until before the first node is detectable (BBCH growth stage 30)

Do not apply in autumn, winter, during frosty weather or if frosts are expected following application.

Spring Wheat

Apply CLOVERMASTER at a rate of 4.5 l/ha

Apply from the five leaf stage until before the first node is detectable (BBCH growth stage 15-30).

Spring Barley

Apply CLOVERMASTER at a rate of 4.5 l/ha

Apply from the three leaf stage until before the first node is detectable (BBCH growth stage 13-30).

Spring Oats

Apply CLOVERMASTER at a rate of 4.25 l/ha

Apply from the three leaf stage until before the first node is detectable (BBCH growth stage 13-30).

Undersown Cereals

Apply CLOVERMASTER to undersown cereals (except spring oats) at a rate of 4.5 l/ha.

Apply CLOVERMASTER to spring oats at a rate of 4.25 l/ha.

Application should be made when the cereal crop is at the correct growth stage, as listed above AND when the undersown crop of clover, lucerne or grass is at the correct growth stage as listed in the grassland section below.

GRASS, CLOVER AND LUCERNE

CLOVERMASTER may be used on Established Grassland (permanent pasture) and Newly Sown Grass.

CLOVERMASTER may also be used on Red and White Clover, Lucerne (alfalfa) and swards containing a mixture of Grasses and Clover or Lucerne.

Water volume: Apply in 200 to 1000 litres of water per hectare.
Use a minimum of rate 225 l/ha in dense swards, or if weed growth is dense.

Spray quality: Apply as a medium quality spray (as defined by BCPC). A spray pressure of 2-3 bars is recommended.

Established Grassland

CLOVERMASTER should be applied to established grassland at a rate of 4.5 l/ha. A top dressing ten days before treatment is recommended to assist kill of weeds and subsequent recovery of the sward. The time of application is best determined according to the growth stage of weeds present (See Weed Control section).

Newly Sown Grass

CLOVERMASTER should be applied to young grass leys at a rate of 4.5 l/ha. Spray when the grasses have at least four leaves and have begun to tiller. Where several species of grass are present the timing should be dictated by the slowest developing species. Applications before tillering may cause a temporary check to growth.

Red and White Clover

CLOVERMASTER should be applied to red or white clover at a rate of 4.5 l/ha. Spray once the clover has reached the first trifoliate leaf stage onwards. Some species of red clover may receive a slight check but this will be outgrown in 6-8 weeks.

Lucerne (Alfalfa)

CLOVERMASTER should be applied to lucerne at a rate of 4.5 l/ha. Spray from the first trifoliate leaf until the fourth trifoliate leaf stage.

MIXING

Apply using a conventional ground vehicle mounted/drawn equipment. Ensure that all application equipment is clean. Add half the required volume of water and start agitation, add the required quantity of CLOVERMASTER. Fill the tank to the required volume of water whilst maintaining agitation. Continuous agitation must be maintained until spraying is complete. After use, the spraying machine must be thoroughly cleaned.

Wash Equipment thoroughly with water and wetting agent or liquid detergent immediately after use.

Spray out, fill with clean water and leave overnight. Spray out again before storing or using for another product. Traces of CLOVERMASTER can cause harm to susceptible crops sprayed later.

COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Plant Protection Products Regulations 2011. It provides additional advice on product use at the discretion of Nufarm.

ACKNOWLEDGMENTS'

®CLOVERMASTER is the registered trademark of Nufarm UK Limited.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but (as we cannot exercise any control over their mixing or use) all conditions and warranties, statutory or otherwise, as to the quality and fitness for any purpose of our goods are excluded, except in so far as such exclusion is prevented by law, and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use.

This product is to be used only in accordance with the recommendations and instructions given on the labels provided with this pack. Use in any other circumstances is entirely at users risk.