Moderately Resistant (Top growth only may be killed)	Bulbous buttercup	Treat in autumn on new leaf or in spring
	Colt's foot	
	Common nettle*	
	Common sorrel	
	Curled dock*	Treat pre flowering or after defoliation
	Dandelion	
	Dwarf thistle	
	Hard rush	Treat as Compact rush
	Horsetails*	Shoots only controlled, apply in May - June
	Meadowsweet	
	Perennial sow thistle*	
	Sheep's sorrel	
	Yarrow	

* Those species marked * should be treated at the higher rate to achieve the level of control indicated.

CROP SPECIFIC INFORMATION

Always spray when the crop is actively growing.

Winter and spring wheat, barley, oats and rye

Application Rate: 1.4 to 3.3 L/ha (see weed susceptibility table)

Maximum total dose: 3.3 L/ha

For all cereals apply in the spring before 1st node detectable stages (GS 31).

- WINTER WHEAT, BARLEY, OATS AND RYE: Spray in the spring from the leaf sheath erect stage.
- SPRING WHEAT, BARLEY AND RYE: Spray after the crop has developed five fully expanded leaves.
- SPRING OATS: Spray after the crop has developed one fully expanded leaf.

Application under very hot conditions at later timings can cause ear damage if the crop comes under stress after application.

Barley is particularly subject to malformation and particular attention must be paid to the correct growth stage if this crop is intended for malting.

All varieties of winter and spring wheat, barley, oats and rye may be treated.

Apply in 200 - 400 L water/ha.

Undersown cereals

Do not apply to cereals undersown with lucerne, peas or safoin.

Red Clover

Application rate: 1.4 L product/ha

Maximum total dose: 1.4 L product/ha

Application should be made when the red clover has at least two trifoliate leaves, and the cereal crop is at the correct growth stage, as listed above.

Only apply if the weeds canopy is dense and covers most of the clover seedlings. Some damage to red clover must be expected, but this will normally be out-grown. Do not apply if white clover is present.

Grasses

Application rate: 2.7 L product/ha

Maximum total dose: 2.7 L product/ha

Application should be made when the grasses have begun to tiller, and the cereal crop is at the correct growth stage, as listed above.

Apply in 200 - 400 L water/ha.

Grassland

Application rate: 2.7 to 3.3 L product/ha

Maximum total dose: 6.6 L product/ha

Use on established grassland and leys no less than 1 year old. Apply LAGOON in spring and summer when growing conditions are favorable. Spray grass for hay or silage 3-4 weeks before cutting. Clover may be checked but recovers by the following Spring. Follow-up applications may also be needed where new seedling weeds appear. An interval of 4-6 weeks should elapse between successive applications if weeds persist.

A top dressing ten days before treatment is recommended to assist kill of weeds and subsequent recovery of the sward. Annual weed species 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 the weeds will be reduced if the grass is growing vigorously at the time of treatment.

Apply in 200 - 400 L water/ha.

Grassland (seed crops)

Application rate: 3.2 L product/ha

Maximum total dose: 3.2 L product/ha

The safe period for treatment occurs when the grasses have at least four leaves and have begun to tiller but at least five weeks preceding ear emergence. The best time varies according to the species and strain of grass concerned. Do not apply more than 3.2 L/ha of LAGOON.

Apply in 200 - 400 L water/ha.

MIXING AND SPRAYING

Half-fill the tank with clean water and add the required quantity of LAGOON, and add the remainder of the clean water with gently agitation which should continue until the contents ate thoroughly mixed. Spray using a MEDIUM/COARSE spray (BCPC).

TANK CLEANING

WASH EQUIPMENT thoroughly immediately after use. Rinse with water three times, drain and allow to dry. Traces of herbicide left in the sprayer may damage susceptible crops if these are subsequently sprayed using the same equipment.

COMPATIBILITY

LAGOON can be tank-mixed with other pesticides, please consult your distributor.

RESISTANCE MANAGEMENT

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.

COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Plant Protection Products Regulations 1995. It provides additional advice on product use at the discretion of the applicant.

TERMS AND CONDITIONS OF SUPPLY, SALE OR USE

All goods supplied by Gemini Agriculture Ltd are high grade and we believe them to be suitable for the purpose for which we expressly supply them: but as we cannot exercise any control over their mixing, use or 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 our Associate Companies for any damage or injury whatsoever arising from their storage, handling, re-application or use. These conditions cannot be varied by our staff, our agents or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

Marketing company:
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71-75 Shelton Street, Covent Garden, London, WC2H 9JQ
Technical helpline: 0845 564 6959

LAGOON

MAPP 17856

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PROTECT FROM FROST

GROUP 4 HERBICIDE

CropLifeUK

Batch No. and manufacturing date: see packing

A selective herbicide for the control of many broad-leaved weeds in cereals and grassland.

A soluble concentrate containing 500 g/L (44.25% w/w) MCPA as the dimethylamine salt.



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 SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
Rinse mouth.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.
To avoid risks to human health and the environment, comply with the instructions or use.

DIRECTIONS FOR USE:
Refer to leaflet attached to the pack.

Scan for Safety Data Sheet or use weblink:
geminiag.com/products

08/23

Gemini AGRICULTURE

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IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL HERBICIDE

Crops	Maximum individual dose L/ha	Maximum total dose L product/ha/year	Latest timing
Winter and spring wheat, barley, rye and oats	3.3	3.3	Before 1st node detectable
Undersown cereals (listed above)			
With red clover	1.4	1.4	Before 1st node detectable
With grass only	2.7	2.7	
Grassland	3.3	6.6	N/A
Grassland (seed crop)	3.2	3.2	5 weeks before heading

Other specific restrictions:
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 CRD'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.
Do not apply by hand-held equipment.
Extreme care must be taken to avoid spray drift onto non-crop plants outside the target area.
Livestock must be kept out of treated areas until poisonous weeds such as ragwort have died and become unpalatable.
This product must not be applied before the end of February in the year of harvest.
Do not apply in volumes less than 200 litres of water per hectare.

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.

THE (COSHH) CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK.

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 GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.
WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.
Do not apply by hand held equipment.
WASH CONCENTRATE from skin and eyes immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work.
WHEN USING DO NOT EAT, DRINK OR SMOKE.
IF YOU FEEL UNWELL, seek medical advice (show the label where possible).

Environmental Protection

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.
DO NOT ALLOW DIRECT SPRAY from ground crops sprayers to fall within 5 m of the top of the bank of a static or flowing waterbody, unless a Local Environmental 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.
This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) scheme.
A LERAP must be carried out in accordance with CRD published guidance before each spraying operation from a ground crop sprayer.
The results of the LERAP must be recorded and kept available for inspection for three years.
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES, with chemical or used containers.
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).
KEEP LIVESTOCK OUT of treated areas until poisonous weeds such as Ragwort, have died and become unpalatable.
Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.
Do not apply before end of February in the year of harvest.

Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
KEEP OUT OF REACH OF CHILDREN.
KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.
WASH OUT CONTAINER THOROUGHLY and dispose of safely.
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.

RESTRICTIONS

- DO NOT roll or harrow within a week of spraying.
- DO NOT mow within four days of application.
- The first four mowings after treatment must be composted for at least 6 months after use.
- DO NOT treat newly established grass less than one year old.
- DO NOT treat grass suffering from drought, disease, during freezing conditions when rain is imminent or other adverse factors.
- Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.
- DO NOT spray in windy weather, avoid drift on to neighbouring crops, especially beans, beet, brassicas, carrots, legumes, lettuce and tomatoes which are very susceptible.
- DO NOT apply before undersowing.
- WASH EQUIPMENT thoroughly immediately after use. Rinse with water three times, drain and allow to dry. Traces of herbicide left in the sprayer may damage susceptible crops if these are subsequently sprayed using the same equipment.
- Do not apply in volumes less than 200 litres of water per hectare.

WEEDS CONTROLLED

Cereals

Susceptibility	Weed Species	Dose (L/ha)	Growth Stage
Susceptible	Black mustard Charlock Fat-hen Field penny-cress Treacle mustard White mustard	1.4	Up to six expanded true leaves or up to 100 mm across/high
	Corn buttercup Runch (wild radish) Shepherd's-purse	1.6	Cotyledons up to two expanded true leaves
	Volunteer oilseed rape	2.7	Up to six expanded true leaves or up to 100 mm across/high
Moderately Susceptible	Common fumitory Common hemp-nettle Common orache Small nettle Wild cabbage Common poppy Field gromwell Smooth sow-thistle Creeping thistle	2.7 – 3.3	Controlled at cotyledons up to two expanded leaves and checked up to 100 mm across/high

Moderately Resistant	Black Bindweed Common chickweed Corn chamomile Corn spurrey Field pansy Groundsel Knotgrass Pale persicaria Redshank Scentless mayweed Speedwells	2.7 – 3.3	Cotyledons up to two expanded true leaves
	Creeping Buttercup Hoary Cress Shepherd's-needle Tares (Vetches) Perennial Sow-thistle	3.3	Cotyledons up to two expanded true leaves

Grassland

Susceptibility	Weed species	Timing
Susceptible (Consistently good control of both roots and shoots)	Greater plantain	
	Ribwort plantain	
Moderately Susceptible (Weeds suppressed and top-growth usually killed)	Autumn hawkbit	
	Cat's ear	
	Common knapweed	
	Compact rush	Spray in April to June. Cut and remove stems either four weeks before or after treatment
	Creeping buttercup*	Treat in spring or early summer
	Creeping thistle	Treat at early flower bud stage
	Common daisy	
	Common ragwort	Spray in spring when in rosette stage before flower spike starts to grow
	Hoary cress	
	Meadow buttercup	Treat in spring or early summer
	Self heal	
	Soft rush	Treat as Compact rush
	Spear thistle	