CLAYTON PROUD

A soluble concentrate containing 305 g/litre (28% w/w) mepiquat chloride plus 155 g/litre (14.2% w/w) 2-chloroethylphosphonic acid. A plant growth regulator for use in winter wheat, winter and spring barley, triticale and winter rye MAPP 17067.

A soluble concentrate containing 305 g/litre (28%w/w) mepiquat chloride and 155 g/litre (14.2%w/w) 2-chloroethylphosphonic acid.	
	**WARNING: MAY BE CORROSIVE TO METALS. HARMFUL IF SWALLOWED.** **MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE.** KEEP ONLY IN ORIGINAL CONTAINER. WASH WITH PLENTY OF WATER AND SOAP THOROUGHLY AFTER HANDLING. DO NOT EAT DRINK OR SMOKE WHEN USING THE PRODUCT. ABSORB SPILLAGE TO PREVENT MATERIAL DAMAGE. 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 for use**.

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

SAFETY PRECAUTIONS Operator protection

2-chloroethylphosphonic acid is an anticholinesterase organophosphorus compound. DO NOT USE if under medical advice NOT to work with such compounds. Engineering control of operator exposure must be used where reasonably practicable, in addition to the following items of personal protective equipment: WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate or 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.
WASH HANDS AND EXPOSED SKIN before meals and after work.

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.

Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
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. Keep dry and frost proof in a suitable pesticide store.

MEDICAL ADVICE

Medical advice can be obtained from the National Poisons Information Service (NPIS). Telephone number 0870 600 6266.

UN 3265 Corrosive liquid, acidic, organic, N.O.S. (contains 2-chloroethylphosphonic acid) Corrosive to aluminium

Approval Holder :- Clayton Plant Protection (UK) Ltd., Bracetown Business Park Clonee, Dublin 15. Ireland. Tel: (00 353) 1 8210127 Email:info@claytonpp.com www.claytonpp.com	**5L e** **Pack size :-** **Batch no :-**

Conditions of Supply: all goods supplied by us are of high quality and we believe them to be correct but, as we cannot exercise control over their storage, handling, mixing or use, or 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.

IMPORTANT INFORMATION **FOR USE ONLY AS AN AGRICULTURAL PLANT GROWTH REGULATOR**			
Crops	Max. Individual Dose Per Hectare	Max. Number of Treatments	Latest Time of Application
Winter wheat and Winter barley: single application	2.0 litres product or 1.5 litres product	One per crop	Before flag leaf ligule just visible stage (before GS 39). Before ear emergence (before GS51).
Winter wheat: split dose applications	1.0 to 1.5 litres product Plus 0.5 to 1.0 litre product	One per crop* One per crop*	Before flag leaf ligule just visible stage (before GS 39). Before flag leaf sheath opening stage (before GS 47).
Winter barley: split dose applications	1.0 to 1.5 litres product Plus 0.5 to 1.0 litre product	One per crop* One per crop*	Before flag leaf ligule just visible stage (before GS 39). Before ear emergence (before GS51).
Triticale	2.0 litres product or 1.5 litres product	One per crop One per crop	Before flag leaf ligule just visible stage (before GS 39). Before ear emergence (before GS51).
Spring barley	1.5 litres product or 1.0 litre product	One per crop One per crop	Before flag leaf ligule just visible stage (before GS 39). Before ear emergence (before GS51).
Winter rye	2.0 litres product	One per crop	Before flag leaf ligule just visible stage (before GS 39).
Other Specific Restrictions: * Maximum total dose must not exceed 2.0 litres product per hectare when applying split dose applications to winter wheat and winter barley - see 'Directions for Use' for details.			
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			

This product is approved under the Plant Protection Products Regulations 2005.

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.

Clayton Proud is a growth regulator which shortens and stiffens the straw of barley, winter wheat, triticale, and winter rye by reducing the length of internodes. Clayton Proud will prevent or suppress early lodging during the vital crop heading stage allowing optimum fertiliser use for production of maximum yields in intensive growing systems. Lodging control and yield increase may be enhanced by using a programme of approved chlormequat chloride-based plant growth regulator followed by Clayton Proud. This programme cannot be used on spring barley.

In winter barley and winter wheat, where Clayton Proud is applied for the prevention of lodging, yield increases will often result when only a low level of lodging occurs, provided conditions are suitable for Clayton Proud application at and after treatment.

In winter barley this is particularly when used in a programme with an approved chlormequat chloride-based plant growth regulator.

The optimum effect of Clayton Proud may be expected in a vigorous, actively growing crop, having a good plant population with an adequate nutrient and moisture supply. The greatest response will be seen in crops sprayed at the correct timing and when good growing conditions prevail at and after application.

Restrictions/Warnings

Clayton Proud is recommended as a component in an intensive growing system where optimum fertiliser use has been made together with appropriate disease control method. Fertiliser rates should not be increased without careful consideration of other factors which might affect the performance of the crop. Application should be carried out with a field sprayer operating according to the manufacturer's instructions. Ensure that the boom height is correctly adjusted. Verification of node stages and emergence of the flag leaf is best done by splitting the stem. Late secondary tillering can occur naturally in crops grown on soils subject to moisture stress and Clayton Proud may accentuate this. This effect may be of more importance in barley varieties being grown for malting, where the presence of green heads may result in rejection of the crop for malting purposes. The prior use of an approved chlormequat chloride-based plant growth regulator (winter barley only) may help to reduce this problem in Clayton Proud treated crops.

Do not apply Clayton Proud to any crop suffering from herbicide damage or physical stress caused by waterlogging, drought or other conditions.
Crops with a substantial moisture deficit should not be treated.
Avoid spray drift on to neighbouring crops.
Do not apply Clayton Proud if rain or frost is expected, nor if the crop is wet, or if significant foot disease problems are expected, particularly with Take all.
Do not apply Clayton Proud to winter varieties sown in the spring.
Do not apply Clayton Proud to crops on soils of low fertility unless these crops regularly receive adequate dressings of basic and nitrogen fertilisers.
Do not apply Clayton Proud to barley, triticale, or winter rye grown on soils containing more than 10 per cent organic matter.
Winter wheat grown on organic soils may be treated.
Do not apply Clayton Proud at temperatures above 21°C. In these conditions it is best to apply Clayton Proud in the evening.
Do not use straw from Clayton Proud treated cereals as a horticultural growth medium or as a mulch.
Clayton Proud may be applied to crops undersown with grasses and clovers.
Some delay in ear emergence may be noticed due to the shortening effect on the higher internodes.
Partial lodging may occur at later stages, though this leaning effect may be desirable to prevent ear loss from stiff strawed crops.
Do not apply Clayton Proud when the leaf sheaths have split and the ears are visible.
Wash equipment thoroughly after use.
Addition of a non-ionic adjuvant can enhance the efficacy of Clayton Proud. When using Clayton Proud, an approved non-ionic adjuvant may be added to the spray tank at the rate of 40 ml per 100 litres spray solution.

Crops and Application Winter Barley and Winter Wheat
Time of Application : Clayton Proud may be applied to winter barley or winter wheat either as a single or split dose treatment. The preferred application method is to apply Clayton Proud using the split dose.
Split Dose Treatment : The first dose should be applied from the second node detectable stage on the majority of tillers (BBCH GS 32) up to and including when the flag leaf is just visible on the majority of tillers (BBCH GS 37). Where an approved chlormequat chloride-based plant growth regulator has been applied previously to the crop, the preferred application will be towards the later end of this timing. The second dose should be applied after the flag leaf is just visible (BBCH GS 37) up to and including first awns visible stage in winter barley (BBCH GS 49), or boots swollen in winter wheat (BBCH GS 45).
Do not apply Clayton Proud when the leaf sheaths have split and the ears are visible.
If growing malting barley varieties, pay particular attention to Restrictions/Warnings.
Single Dose Treatment : The optimum application timing is from the second node detectable stage on the majority of tillers (BBCH GS 32) up to and including when the flag leaf is just visible on the majority of tillers (BBCH GS 37). Where an approved chlormequat chloride-based plant growth regulator has been applied previously to the crop, the preferred application will be towards the later end of this timing. If it has proven impractical to apply Clayton Proud at the optimum timing, application at a reduced rate (see below) can still be made after the flag leaf is just visible up to and including first awns visible in winter barley (BBCH GS 49), or boots swollen in winter wheat (BBCH GS 45), but control of lodging may not be as good as with the earlier timings.
Do not apply Clayton Proud when the leaf sheaths have split and the ears are visible. If growing malting barley varieties, pay particular attention to Restrictions/Warnings.
Spring Barley
Time of Application : The optimum application timing is from the second node detectable stage on the majority of tillers (BBCH GS 32), up to and including when the flag leaf is just visible on the majority of tillers (BBCH GS 37). If it has proven impractical to apply Clayton Proud at the optimum timing, an application can still be made up to and including first awns visible (BBCH GS 49), but lodging control may not be as good as with the earlier timings. Also, crops treated at the later timing are more likely to be subject to moisture stress. Particular attention should be paid to growing conditions when applying Clayton Proud at this later timing.
Do not apply Clayton Proud when the leaf sheaths have split and the ears are visible. If growing malting barley varieties, pay particular attention to Restrictions/Warnings.
Triticale
Time of Application : The optimum application timing is from the second node detectable stage on the majority of tillers (BBCH GS 32) up to and including when the flag leaf is just visible on the majority of tillers (BBCH GS 37). Where an approved chlormequat chloride-based plant growth regulator has been applied previously to the crop, the preferred application will be towards the later end of this timing. If it has

proven impractical to apply Clayton Proud at the optimum timing, application at a reduced rate (see below) can still be made after the flag leaf is just visible up to and including the boots swollen stage (BBCH GS 45), but control of lodging may not be as good as with the earlier timings.
Do not apply Clayton Proud when the leaf sheaths have split and the ears are visible.

Winter Rye

Time of Application :

Apply Clayton Proud from the second node detectable stage on the majority of tillers (BBCH GS 32) up to and including when the flag leaf is just visible on the majority of tillers (BBCH GS 37). Where an approved chlormequat chloride-based plant growth regulator has been applied previously to the crop, the preferred application will be towards the later end of this timing.

Rates of Application :

Apply Clayton Proud as outlined below in a minimum of 220 litres of water per hectare. When using Clayton Proud, an authorised non-ionic wetter must be added to the spray tank at the rate of 40 ml per 100 litres spray solution.

CROP	RATE OF CLAYTON PROUD L/ha	
	Second node detectable to flag leaf just visible	After the flag leaf just visible to boots swollen (winter wheat and triticale) or awns just visible (winter and spring barley
Winter wheat Where an approved chlormequat chloride based plant growth regulator has not been applied or in a programme following such an application where there is a high risk of severe lodging In a programme following an approved chlormequat chloride based plant growth regulator: Other lodging situations	Split dose 1.0–1.5 Single dose 2.0 Single dose 1.5	Followed by 0.5–1.0 note a or 1.5 or 1.0
Winter barley	Split dose 1.0–1.5 Single dose 2.0	Followed by 0.5 – 1.0 note a
Spring barley	1.0 – 1.5 note b	Or 1.5
Triticale	2.0	Or 1.0
Winter rye	2.0	Not recommended

Note a : Do not exceed a total of 2.0 litres Clayton Proud per hectare.
Note b : Use the higher rate where there is a high risk of early lodging. DO NOT apply this rate after the flag leaf just visible stage.

Mixing and Spraying

Apply as a MEDIUM spray, as defined by BCPC. Do not prepare more spray solution than is required. Three quarters fill the tank with clean water and start the agitation. Invert the container several times before opening. Add the required quantity of Clayton Proud to the spray tank while re-circulating, and separately, the required amount of an approved non-ionic adjuvant. Add the remainder of the water and continue agitation until spraying is complete.
When tank mixes are to be used, take note of any instructions given regarding the order of mixing. Each product should be added separately to the spray tank and fully dispersed before the addition of any further product(s). All tank mixes should be used immediately after mixing.
NOTE: Always add an approved non-ionic adjuvant when using Clayton Proud in tank mix.
Rinse empty containers thoroughly, using an integrated pressure rinsing device or by manually rinsing three times. Add washings to tank at time of filling and dispose of container safely.

Compatibility

Mixtures Known to be incompatible :

Clayton Proud + mancozeb
Clayton Proud + Opus Team + fluroxypyr
Clayton Proud + metsulfuron-methyl
Other mixtures not referred to here may also prove to be incompatible.