# CLAYTON COLDSTREAM

### **MAPP 12724**

Contains 400 g/l chlormequat chloride in a soluble concentrate with 26 g/l manganese as MnEDTA

Growth regulator to reduce lodging of winter and spring wheat, winter and spring oats, winter barley and winter rye, formulated with chelated manganese.



## Harmful In contact with skin and if swallowed

**HARMFUL** 

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

#### IMPORTANT INFORMATION

Crop	Maximum individual dose of product	Maximum number of treatments per crop	Latest time of application
Winter wheat	4.2 l/ha	one	before the 1 <sup>st</sup> node is detectable
	or 3 l/ha plus	one	before the 1 <sup>st</sup> node is detectable
	1.2 l/ha	one	before the 2 <sup>nd</sup> node is detectable
Spring wheat	2.1 l/ha	one	before the 1 <sup>st</sup> node is detectable
Winter rye	4.2 l/ha	one	before the 2 <sup>nd</sup> node is detectable
Winter barley	4.2 l/ha	one	before the 1 <sup>st</sup> node is detectable
Winter oats Spring oats	4.2 l/ha	one	before the 3 <sup>rd</sup> node is detectable

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 GLOVES when handling the concentrate.

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

WASH CONCENTRATE from skin or eyes immediately.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

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

# **Environmental protection**

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

# Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

KEEP OUT OF REACH OF CHILDREN.

This material and its container must be disposed of in a safe way.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank, and dispose of safely.

DO NOT RE-USE CONTAINER for any purpose.

To avoid risks to man and the environment, comply with the instructions for use.

Safety data sheet available for professional user on request.



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This product is approved under the Control of Pesticides Regulations 1986.

Clayton Plant Protection (UK) Ltd. Net contents: 5-20 litres

Unit F10

Bracetown Business Park PROTECT FROM FROST

CLONEE Co. Meath Ireland

Tel: (00 353) 1 8210127 Batch No:

CORROSIVE LIQUID, N.O.S. (contains chlormequat chloride).

UN 1760; Class 8; Packing group III

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.

## **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.

#### **GROWTH REGULATION IN CEREALS**

Clayton Coldstream can be applied to all varieties of wheat, oats, winter barley and winter rye. The time of application is critical and it is essential to apply Clayton Coldstream only to healthy crops, which are actively growing. The benefits can be reduced lodging and prevention of loss of yield. Results vary according to the cereal being treated. Under the recommended conditions of application, Clayton Coldstream will thicken and strengthen the straw and in the case of wheat and oats, in particular, will shorten the straw. Effects on lodging in winter barley are less consistent than in wheat or oats, but yield increases have been obtained with and without reduction in lodging. Use in rye has given inconsistent results.

### THE BENEFITS OF CO-FORMULATION WITH MANGANESE

Potentially high-yielding crops may display symptoms of manganese deficiency during periods of rapid growth, owing to the low availability of manganese from the soil reserves. The recommended period of application of chlormequat conveniently coincides with a period of high plant demand for manganese. Clayton Coldstream, specially formulated to provide supplemental manganese to the listed cereal crops in addition to growth regulatory functions, dispenses with the need for an extra spraying operation. Under many conditions, an application of Clayton Coldstream can provide sufficient supplemental manganese for maximum yield of the treated cereal crop, but under circumstances of very high plant demand and/or low soil availability, further treatment with foliar manganese may be necessary at a later date.

#### **RECOMMENDATIONS**

Crop	Rate of Application	Time of Application
Winter wheat	Single dose	From fully tillered to just before the 1 <sup>st</sup> node (GS31) is
	4.2 l/ha	detected. Optimum results are obtained at leaf-sheath
Treat winter		lengthening (GS30).
wheat varieties	Split doses	1 <sup>st</sup> dose: from fully tillered to just before the 1 <sup>st</sup> node (GS31) is
sown in the spring	1 <sup>st</sup> dose	detected.
as for winter	3 l/ha	
wheat.	2 <sup>nd</sup> dose	2 <sup>nd</sup> dose: apply before the 2 <sup>nd</sup> node (GS32) is detected.
	1.2 l/ha	
Spring wheat	2.1 l/ha	From fully tillered to just before the 1 <sup>st</sup> node (GS31) is
. •		detected. Optimum results are obtained at leaf-sheath
		lengthening (GS30).



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Winter barley	4.2 l/ha	From mid tillering to just before the 1 <sup>st</sup> node (GS31) is detected. If possible apply before leaf-sheath lengthening (GS30). Even though the earliest application timing may be reached in the autumn in early sown crops, application should be delayed until the spring.	
Winter oats Spring oats	4.2 I/ha The addition of an authorised non-ionic wetting agent is essential for best results.	When the 2 <sup>nd</sup> node (GS32) of most tillers can be detected to before the 3 <sup>rd</sup> node (GS33) is detected. The crop will normally be 30-50cm high at treatment. Best overall control of lodging will be obtained with the shorter strawed varieties.	
Winter rye	4.2 l/ha	From leaf-sheath lengthening (GS30) up to and including the 1 <sup>st</sup> node (GS31) being detected on the majority of the tillers. Lodging may not be controlled but it can often be reduced by this treatment.	

#### **CROP AND WEATHER CONDITIONS**

Best results are obtained in vigorous crops actively growing in a warm, moist environment. Do not spray during periods of frost or low night temperatures, onto wet foliage or if rain is expected within 6 hours. Crops under stress due to extremes of temperature, drought or water-logging, pest or disease attack, nutrient deficiency or any other factor should not be sprayed. Do not treat late-sown crops.

### **UNDERSOWN CROPS**

Crops undersown with grasses and clovers may be treated.

#### **APPLICATION**

Apply Clayton Coldstream in 200-450 l/ha water as a MEDIUM spray (BCPC definition). When crop cover is dense use the higher recommended water volume. Avoid overlapping spray swaths and drift onto neighbouring crops.

#### MIXING

Add the measured amount of Clayton Coldstream and separately the wetting agent, if required, via a filter to the spray tank half-filled with water and under agitation. Top up the tank with water and keep under agitation until completion of spraying. Spray immediately after mixing.

### **COMPATIBILITY**

Clayton Coldstream is physically compatible in tank-mixtures with approved salt formulations of MCPA (MAPP 14814). When tank-mixing with the phenoxy herbicides, care must be taken to ensure that a time of application appropriate to each product is chosen. Tank-mixtures with the phenoxy herbicides for use on oats are not recommended due to the later time of application for this crop. Products containing diffusenican are not compatible with Clayton Coldstream. The Directions for Use of this label and those of the selected product must be strictly followed. Mixtures with nitrogenous foliar feeds are not recommended. When tank-mixing, add each product separately to the spray tank, taking due note of any label directions as to the order of mixing.

#### **AFTER USE**

Immediately after use, thoroughly clean the sprayer and utensils with water and a cleaning agent recommended for the cleaning of spraying equipment.



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