GROUP 27 HERBICIDE

CLAYTON TASSEL

A suspension concentrate containing 100 g/litre mesotrione. Selective herbicide for the control of annual broad-leaved weeds in grain and forage maize. **MAPP20850**

CLAYTON TASSEL - contains 100 g/L (9.4% w/w) mesotrione

DANGER

MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE DAMAGE.
SUSPECTED OF DAMAGING THE UNBORN CHILD.
VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing mist/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
If skin irritation or a rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Collect spillage.
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.

Approval Holder: Clayton Plant Protection Ltd., Bracetown Business Park, Clonee, Dublin 15. Ireland. Tel: (00 353) 1 8210127 Email: info@claytonpp.com www.claytonpp.com **Marketing company :** Clayton Plant Protection UK Ltd. (Contact details as above)	Contents: **5 L e** Batch No: see package. PROTECT FROM FROST SHAKE THOROUGHLY BEFORE USE UN3082

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

IMPORTANT INFORMATION: FOR USE ONLY AS A PROFESSIONAL HERBICIDE			
Crops	**Maximum Number of Treatments**	**Maximum Individual Dose**	**Latest time of Application**
Grain maize and forage maize	1 per crop	1.0 L product/hectare	8 leaves unfolded stage (BBCH 18)
Other Specific Restrictions: Application can be made from BBCH 12 only. Do not apply via hand-held equipment. **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 PROTCTION 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.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.
WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH SPLASHES from skin immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work. Wash all protective clothing after use.

Environmental protection

Extreme care must be taken to avoid spray drift onto non- crop plants outside of the target area. 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.

To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements. DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 meters of the top of the bank of any static or flowing waterbody, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1m of the top of a ditch which is dry at the time of application. Aim spray away from water.This product qualifies for inclusion within the Local Environmental 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.

Storage and disposal

KEEP OUT OF REACH OF CHILDREN.
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 the container safely.
EMPTY CONTAINER completely and dispose of safely.

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.

GENERAL INFORMATION

Clayton Tassel is a suspension concentrate containing the herbicide active ingredient mesotrione for the control of annual broad-leaved weeds in grain maize and forage maize crops only. Clayton Tassel is absorbed by the weed foliage and works mainly by means of uptake through the leaves and limited uptake through the roots.

After entry into the plant, mesotrione is translocated to the growing points. For best results, use when there is adequate soil moisture, under warm/humid conditions and when the weeds are small and actively growing. Following application sensitive weed species show chlorosis and subsequently die.

WARNINGS AND RESTRICTIONS

DO NOT USE on any crop that is being grown for seed. DO NOT USE on any sweetcorn variety.

To avoid damage to plants outside the target area, DO NOT APPLY under windy conditions and take extreme care to avoid spray drift. All broad-leaved species are particularly susceptible to damage from spray drift.

Do not apply to crops that are under stress from any cause including pest or disease attack, nutrient deficiency, drought, waterlogging, previous herbicide application or any other cause. Do not apply during very cold or frosty conditions or when large temperature fluctuations or excessive rainfall are forecasted or expected.

Do not allow spray bouts to overlap.

Before use, make sure the sprayer is cleaned from any previous use, and that it is calibrated to apply the recommended spray volume and pressure. Make sure that all the sprayer nozzles are performing equally and that the spray boom is set at the correct height above the crop. Trace amounts of Clayton Tassel remaining in the sprayer after use can cause damage to other crops subsequently treated with the same equipment. Immediately after use thoroughly clean the sprayer and all equipment as follows: fill the spray tank with clean water to a minimum of 10% of its total volume. Flush the water through the sprayer, including nozzles and spray booms and lines. Drain and repeat the procedure. During spray equipment cleaning, do not allow the product or sprayer equipment washings to contaminate water.

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

CROPS AND TIMING

For use in grain maize and forage maize only.

Apply from when the crop has between 2 to 8 leaves.

For best results, use when there is adequate soil moisture, under warm/humid conditions and when the weeds are small and actively growing (see "WEEDS CONTROLLED" for weed species and maximum sizes controlled).

Ensure that the crop and weed foliage are dry at the time of application, do not use if heavy rainfall is forecasted or expected soon after application. Under extreme weather conditions, some chlorosis (mild – moderate) may occur on the crop foliage. This chlorosis is normally transient and there is no effect on crop yield.

Always check the condition of the crop and the weeds immediately prior to application. Treatment in poor growing conditions or in dry soil may give less reliable control.

RESISTANCE MANAGEMENT

Clayton Tassel contains mesotrione which is from a group of herbicides referred to as 4-HPPD inhibitors (HRA group 27). This class of compounds act by disrupting the synthesis of certain plant pigments involved in photosynthesis.

At the present time there is no known cross-resistance to mesotrione in weeds that exhibit resistance or reduced sensitivity to other herbicides with different modes of action. The use of Clayton Tassel in mixtures and sequences with

other herbicides approved for use in grain and forage maize crops and with a different mode of action is recommended to help to reduce the development of resistance. As herbicides in the group of 4-HPPD inhibitors are currently only available in maize crops, crop rotation with the use of herbicides with a different mode of action will also help to reduce the development of resistance. In the event that strains of weeds develop resistance or become less sensitive to a specific herbicide such as mesotrione, weed control may be reduced.
Where maize crops are grown in successive seasons, avoid the use of Clayton Tassel for more than two successive seasons to avoid the potential for weed resistance developing to mesotrione.

APPLICATION RATE

Apply Clayton Tassel at 0.75-1.5 litres per hectare in 200-300 litres of water per hectare (ha).
Select the dose rate from within this recommended range according to the weed species present, see "WEEDS CONTROLLED".
Select the most appropriate water volume from within this recommended range to give good even cover of the weed foliage: Use the minimum water volume (200 litres per ha) wherever possible, but the higher volume (300 litres per ha) may be required if the weed foliage is dense. Do not exceed the maximum recommended water volume.
Use a conventional hydraulic nozzle field crop sprayer with suitable nozzles operating at a pressure of 2-3 bar to apply a MEDIUM quality spray (BCPC). The use of any tank mix adjuvant with Clayton Tassel is not required and is not recommended.

WEEDS CONTROLLED

Clayton Tassel applied at 0.75 L/ha will control the broad leaf weed species listed in the table below, from emergence until the maximum growth stage as indicated. A dose of 1.0 L/ha will give some control of cockspur grass from emergence to the 1 tiller stage.

Weed Species	0.75 L/ha	1.0 L/ha	Maximum Growth Stage or Size Controlled
Black nightshade	S	S	10 leaves or 15 cm
Charlock	S	S	Flowering
Common amaranth	S	S	8 leaves or 10 cm
Common chickweed	S	S	10 cm diameter
Fat hen	S	S	12 leaves or 20 cm
Field pansy	S	S	6 leaves
Oilseed rape (volunteer)	S	S	6 leaves
Prickly sowthistle	MR	S	6 leaves
Redshank	MS	MS	6 leaves or 10 cm

S= Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant

MIXING

Half fill the sprayer tank with clean water and begin gentle agitation. Add the required quantity of product into the sprayer tank and allow to disperse fully. Rinse the empty containers thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add the washings to the sprayer and continue agitation whilst topping up the tank with water to the required level. Continue agitation until the mix is sprayed out. Spray immediately after mixing, do not allow the mixture to stand in the sprayer. When using tank-mixes follow any specified order of addition on the partner product label(s).

FOLLOWING CROPS

Crops following normal harvest of the treated crop:

Autumn-sown crops

Rye-grass, winter wheat, durum wheat and winter barley can be planted in the autumn following harvesting of a treated crop.
Oilseed rape can be planted in the Autumn following harvesting of a treated crop, provided that the land is ploughed to a depth of at least 15cm and then cultivated prior to sowing.

Spring-sown crops

Spring barley, spring wheat, rye-grass, forage maize and grain maize can be planted in the spring following harvesting of a treated crop.
DO NOT sow any other crop in the year following harvesting of a treated crop.

FAILED CROPS

In the event of failure of a treated crop for any reason, plough prior to re-seeding. Sow only forage maize or grain maize after the failure of a treated crop. Some effect on the re-seeded crop may be seen shortly after emergence but these are usually only temporary and quickly outgrown.

COMPATIBILITY

Clayton Tassel may be applied as a tank-mix with a range of products. Check with your supplier or agronomist adviser for compatibility information on specific tank-mixes.

SPRAYER DECONTAMINATION

Immediately after use thoroughly clean the sprayer and all equipment as follows: fill the spray tank with clean water to a minimum of 10% of its total volume. Flush the water through the sprayer, including nozzles and spray booms and lines. Drain and repeat the procedure. It is essential that all nozzles, filters, tubing, strainers, pumps and the spray tank are thoroughly cleaned after use to avoid the risk of damage to crops subsequently treated with the same equipment.

COMPANY ADVISORY INFORMATION

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

TERMS AND CONDITIONS OF SUPPLY:

Many factors can affect or influence the activity of this product, including, but not limited to: weather and soil conditions, crop variety, treatment timing, water volume, application rates, spraying techniques, crop rotation, regional factors, and the occurrence and development of strains resistant to the active ingredient. Under certain circumstances, changes in activity or crop damage can occur. The manufacturer or supplier is unable to accept any liability in these circumstances. All goods supplied by us are of high quality and we believe them to be correct and suitable for the purpose for which we expressly supply them, but, as we cannot exercise any 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.

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