


# Clayton Zebo

MAPP 18460

**A water dispersible granule formulation containing 75% w/w mancozeb.**

Clayton Zebo is a protectant fungicide for the control of blight in potatoes, reduction of leaf spot and useful control of brown rust in wheat, control of rust in bulb onion and shallot crops and control of leaf blight in carrot and parsnip.

Contains 750g/Kg Mancozeb



**Warning**

Very toxic to aquatic life with long lasting effects.  
May cause an allergic reaction.  
Causes serious eye irritation.  
Suspected of damaging the unborn child.  
Keep out of the reach of children.  
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**

## PROTECT FROM FROST

### Transport Information:

UN 3077

ADR/RID Class: 9

Packaging Group: III

**Net Contents: 25 Kg e**

Marketing Company:

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## **IMPORTANT INFORMATION**

### **FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE**

<b>Crops/situations</b>	<b>Maximum individual dose: (Kg product / ha)</b>	<b>Maximum total dose:</b>	<b>Maximum number of treatments per crop</b>	<b>Latest time of application:</b>
Potato	2	-	8 (see other specific restrictions 2)	7 days before harvest
Durum wheat, wheat	2	-	3	Before milky grain ripe stage (GC65)
Bulb onion (outdoor), shallot (outdoor)	2.5 (see other specific restrictions 3)	-	4 (see other specific restrictions 4)	28 days before harvest
Carrot (outdoor), parsnip (outdoor)	2 (see other specific restrictions 5)	-	4 (see other specific restrictions 6)	30 days before harvest

**Other specific restrictions:**

1. 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.
2. For use on potato: minimum interval of 7 days must be observed between applications.
3. For outdoor crops of bulb onion and shallot, the rate of product applied must not exceed 2.5Kg product per hectare irrespective of the water volume being used.
4. For outdoor crops of bulb onions and shallot a minimum interval of 7 days between applications must be observed.
5. For outdoor crops of carrot and parsnip, the rate of product applied must not exceed 2.0 Kg product per hectare irrespective of the water volume being used.
6. For outdoor crops of carrot and parsnip, a minimum interval of 14 days must be observed.

**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 CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND SUITABLE PROTECTIVE RESPIRATORY EQUIPMENT\***when handling the product

\*Disposable filtering facepiece respirator to at least EN149 FFP2 or equivalent.

**WEAR SUITABLE PROTECTIVE GLOVES** when handling contaminated surfaces.

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 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).

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 m of the top of the bank of a static or flowing water body, unless a Local Environment 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. Aim spray away from water.

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.

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

Aim spray away from water.

### **Storage and Disposal**

**KEEP OUT OF REACH OF CHILDREN.**

**KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.**

**KEEP IN ORIGINAL CONTAINER** tightly closed and in a safe place.

**WASH OUT CONTAINER THOROUGHLY**, emptying washings into spray tank and dispose of 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.

### **NOTES:**

Avoid spray overlap or excessive application.

The best available application technique, which minimises off-target drift, should be used to reduce potential effects on non-target insects or other arthropods.

Allow foliage to dry before applying CLAYTON ZEBO after rainfall or irrigation.

Do not apply CLAYTON ZEBO if rain is expected within four hours of application.

It is important to keep containers tightly closed and stored in a cool, dry place.

Keep away from fire and sparks.

Once the container has been opened the material should not be kept over from one season to the next.

## **RESISTANCE**

According to FRAC guidance potato blight is considered to be a disease with a moderate to high risk of developing resistance to fungicides. CLAYTON ZEBO is a multi-site contact fungicide and because of this the risk of resistance development is reduced however it is in your interest and best practice to plan a programme of treatments using fungicides with different modes of action throughout the season for all crops.

## **CROP SPECIFIC INFORMATION**

### **POTATOES**

#### **Use**

Control of late blight (*phytophthora infestans*) and early blight (*alternaria solani*).

#### **Application rate**

2.0 Kg/ha

#### **Water volume**

150 – 600 L/ha

#### **Timing**

Applications must be made preventively as part of a blight control programme with regard to Blight Infection Periods or local blight warnings. In the absence of any warnings, applications should commence when the crop meets along the row. If a blight warning is issued for the area, apply the first spray immediately, irrespective of the growth stage of the crop.

In common with all protectant fungicides, it is essential to spray CLAYTON ZEBO before blight appears in the crop. For this reason a regular spraying programme should be carried out.

CLAYTON ZEBO is not a curative product so do not use if blight is present in the crop. If sprays are delayed due to poor weather and blight risk is severe then consider applying CLAYTON ZEBO in tank mixture with an active ingredient that offers “kick back” activity such as cymoxanil.

#### **Interval between applications**

Minimum 7 days.

Apply CLAYTON ZEBO on a 7-10 day spray interval, depending on disease pressure. As disease pressure and the risk of late blight infection increases, the interval should be shortened.

Situations classed as high risk would be:

- Irrigated crops
- Extended periods of warm, humid weather and
- Areas where main crop and early potatoes are a commonly grown crop or
- Areas where local weather conditions allow for an increased threat of blight epidemics, e.g. the West and South West of England/Wales and East Anglia
- Where blight has been identified in nearby potato crops or on volunteer potatoes or on potato dumps.

#### **Maximum number of applications**

8 per crop

#### **Latest time of application**

7 days before harvest

### **WINTER AND SPRING WHEAT, DURUM WHEAT**

#### **Use**

Reduction of leaf spot (*Septoria tritici*) and useful control of light to moderate attacks of brown rust.

#### **Application rate**

2.0 Kg/ha

**Water volume**

200-400 L/ha

**Timing**

CLAYTON ZEBO is a protectant fungicide and will not control established disease infections. If leaf spot or brown rust is already established or “kick-back” activity is required CLAYTON ZEBO should be applied in combination with an appropriate fungicide with curative activity.

**Leaf spot**

A programme of two applications of CLAYTON ZEBO with a 14 day spray interval, normally starting between GS31 and GS37, should be made to prevent the disease reaching the flag leaf and leaves 2 and 3, though in high risk situations a third application may be required after a further interval of 14 days. It is essential for best results to apply before any disease is well established.

**Brown rust**

One or two sprays of CLAYTON ZEBO should be made beginning at the onset of disease infection.

**Interval between applications**

14 days

**Maximum number of applications**

3 per crop

**Latest time of application**

Before milky grain ripe stage (GS 65)

**OUTDOOR CROPS OF BULB ONION AND SHALLOT****Use**

Protectant control of rust (*Puccinia allii*)

**Application rate**

2.5 Kg/ha

**Water volume**

200 – 1000 L/ha

Increase the spray volume with the growth of the plant to ensure good coverage and penetration. The rate of CLAYTON ZEBO should not exceed a maximum of 2.5 kg/ha irrespective of the water volume used.

**Timing**

Apply from the 2 leaf stage onwards as a protectant spray before disease has established in the crop.

**Interval between applications**

7 days

**Maximum number of applications**

4 per crop

**Latest time of application**

28 days before harvest

**OUTDOOR CROPS OF CARROT AND PARSNIP**

Qualified minor use recommendation based on limited evidence of efficacy

**Use**

Alternaria leaf blight (*Alternaria dauci*)

**Application rate**

2.0 Kg/ha

**Water Volume**

200 – 1000 L/ha

Increase the spray volume with the growth of the plant to ensure good coverage and penetration. The rate of CLAYTON ZEBO should not exceed a maximum of 2.0 kg/ha irrespective of the water volume used.

**Timing**

Apply from the 2 leaf stage onwards as a protectant spray before disease has established in the crop.

**Interval between applications**

14 days

**Maximum number of applications**

4 per crop

**Latest time of application**

30 days before harvest

## APPLICATION

**Equipment**

CLAYTON ZEBO should be applied through hydraulic sprayers providing they are in good working order and have been calibrated according to the manufacturers' instructions.

**Spray Quality**

Use a MEDIUM quality spray (as defined by the British Crop protection Council) at 2-3 bar in a suitable water volume to ensure complete cover of the foliage. Spray fans should overlap just before the top of the crop.

**Water Volumes**

CLAYTON ZEBO should be applied in a minimum of 150 litres of water per hectare. Refer to individual crop recommendations for specific advice.

**Mixing**

Add half the required volume of water to the spray tank and begin agitation. Remove the filter basket and pour the required amount of CLAYTON ZEBO into the partially filled spray tank. Continue agitation while topping up the tank and during spraying and transport operations.

When tank-mixing with other products add the CLAYTON ZEBO after the other product has already dispersed in the spray tank.

**Compatibility**

For information about compatible tank mixtures please consult your distributor/adviser.

## CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use or the weather conditions before, during or 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 re-sellers 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. Clayton Plant Protection product batch numbers have complete traceability back to the original manufacturers' batch numbers and are available to CRD on request.