



Clayton Ohio

A suspension concentrate containing 430 g/L (39.81% w/w) tebuconazole for the control of foliar diseases in winter and spring crops of wheat (excluding durum), triticale, barley, oats, rye, oilseed rape, cabbage, swedes, carrots, parsnips, horseradish, field beans and turnips. **MAPP 19390**

Clayton Ohio contains 430g/L tebuconazole

SIGNAL WORD : WARNING
SUSPECTED OF DAMAGING THE UNBORN CHILD
VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P281: Use personal protective equipment as required.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P391: Collect spillage.
P405: Store locked up.
P501: 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.

IMPORTANT INFORMATION FOR USE ONLY AS AN AGRICULTURAL / HORTICULTURAL FUNGICIDE			
Crop	Maximum individual dose (L/ha)	Maximum number of treatments per crop	Latest time of application
Winter barley, wheat, rye, oats and triticale	0.6	2	Before grain milky rape stage or 35 days before harvest
Spring barley, wheat and oats	0.6	1	Before grain milky rape stage or 35 days before harvest
Oilseed rape (spring) (winter)	0.6	2	Before most seeds are green/brown mottled or 56 days before harvest.
Field bean, swede and turnips	0.6	1	35 days before harvest
Cabbage	0.6	1	21 days before harvest
Carrots, parsnips and horseradish	0.6	2	21 days before harvest

READ ALL OTHER SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE. 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.

<p>Approval Holder : Clayton Plant Protection Ltd., Bracetown Business Park, Clonee, Dublin 15. Ireland. Tel: (00 353) 1 8210127 www.claytonpp.com Email: info@claytonpp.com</p> <p>Marketing company : Clayton Plant Protection UK Ltd Contact details as above</p>	<p>Pack size : 5L e</p> <p>UN 3082</p> <p>Batch No :</p> <p>PROTECT FROM FROST SHAKE WELL BEFORE USE</p>
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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.

SAFETY PRECAUTIONS

Operator Protection:

Engineering control of operator exposure must be used where reasonably practicable in addition of the following personal protective equipment:

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate or applying by hand held equipment.

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

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

WASH CONCENTRATE from skin or eyes immediately.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before eating and drinking 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.

Storage and Disposal

DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

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.

Other Specific Restriction: This product must not be applied via hand-held equipment.

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 OHIO is recommended for control of a wide range of diseases on winter and spring sown cereals, spring and winter oilseed rape, field beans, cabbages, carrots, horseradish, parsnips, swedes and turnips. For best disease control and yield benefit CLAYTON OHIO should be applied at an early stage of disease development, before infection spreads to new crop growth.

RESISTANCE MANAGEMENT

CLAYTON OHIO contains a triazole fungicide that belongs to the group of Demethylation Inhibitors (DMI).

Repeated applications of DMI products may result or may already have resulted into the occurrence of less sensitive pathogens to DMI fungicides. Therefore, repeated application of CLAYTON OHIO alone should not be used on the same crop against a high risk pathogen such as cereal powdery mildew and Septoria leaf blotch. It is important to use the recommended rate.

Tank mixtures or alternation with fungicides having a different mode of action (e.g. morpholines) have been shown to protect against the development of resistant forms of disease.

When used in tank mixture, the recommended rate should be maintained. The possible development of diseases resistant to Clayton Ohio cannot be excluded or predicted. Where such resistant strains occur, it is unlikely to give satisfactory control. Resistance to some DMI fungicides has been identified in Septoria leaf blotch (Septoria

tritici) which may seriously affect the performance of some products. For further advice on resistance management in DMI's contact your agronomist or specialist advisor and visit the Fungicide Resistance Action Group (FRAG)-UK website.

DISEASES

Use under curative situations (when disease is already well established and actively moving up the plant) must be avoided.

Cereals:

Wheat: Reduction of Septoria Leaf Spot (*Septoria tritici*), Glume Blotch (*Septoria nodorum*), Ear disease complex (incl. *Fusarium* spp, *Alternaria* and *Cladosporium*), Yellow Rust (*Puccinia striiformis*) and Brown Rust (*Puccinia recondita*).

Triticale: Reduction of Septoria Leaf Spot (*Septoria tritici*), Yellow Rust (*Puccinia striiformis*), Brown Rust (*Puccinia recondita*), Powdery Mildew (*Erysiphe graminis*), and *Fusarium* ear disease (*Fusarium* spp.). **Barley:** Yellow Rust (*Puccinia striiformis*), Brown Rust (*Puccinia hordei*), moderate control of Leaf Blotch (*Rhynchosporium secalis*), and reduction of Net Blotch (*Helminthosporium teres*).

Rye: Yellow Rust (*Puccinia striiformis*), Brown Rust (*Puccinia recondita*), Powdery Mildew (*Erysiphe graminis*), and moderate control of Leaf Blotch (*Rhynchosporium secalis*).

Oats: Crown Rust (*Puccinia coronata*).

Swedes & Turnips: Powdery Mildew (*Erysiphe cruciferarum*)

Oilseed rape: Light Leaf Spot (*Pyrenopeziza brassicae*), Phoma Leaf Spot / Stem Canker (*Leptosphaeria maculans*), Dark Leaf Spot/Pod Spot (*Alternaria brassicae*), Sclerotinia Stem Rot (*Sclerotinia sclerotiorum*), Ringspot (*Mycosphaerella brassicicola*).

Cabbage: Black spot (*Alternaria* spp.), Light Leaf Spot (*Pyrenopeziza brassicae*), Powdery Mildew (*Erysiphe cruciferarum*), Ringspot (*Mycosphaerella brassicicola*).

Field Beans: Chocolate Spot (*Botrytis fabae*), Bean rust (*Uromyces vicia-fabae*)

Carrots: Blight (*Alternaria dauci*), Powdery Mildew (*Erysiphe heraclei*), Sclerotinia (*Sclerotinia sclerotiorum*)

Horseradish: Black spot (*Alternaria* spp.)

Parsnips: Powdery mildew (*Erysiphe* spp.)

APPLICATION Rate of use

Maximum individual dose: 0.6 litre per hectare on all named crops

Sprayers should be THOROUGHLY CLEANED before use and filters and jets checked for damage and blockages. A pressure of 2-3 bar (30-40 psi) is recommended.

Apply as a MEDIUM quality spray (as defined by BCPC). Boom height and water volume should be adjusted to ensure good coverage of the crop, particularly at later growth stages. In dense crops at later growth stages, higher water volumes should be used as recommended.

CROP SPECIFIC INFORMATION CEREALS

Clayton Ohio may be used on all varieties of winter and spring sown wheat (excluding durum wheat), barley, triticale, rye and oats:

Maximum individual dose: 0.6 litre per hectare.

Maximum 2 applications per crop on winter cereals, where a second application is made this must not be applied earlier than early boot/flag leaf extending stage (BBCH 40). Only 1 application may be applied to spring cereals.

Water Volume Clayton Ohio should be applied in 200-400 l/ha of water, with following recommendations.

Most crops 200 litres/hectare

Dense crops after the first node is detectable 250 litres/hectare

Large crops, varieties highly susceptible to disease 300 litres/hectare

Wheat, triticale, barley, rye and oats: CLAYTON OHIO may be applied at any stage before end of flowering (BBCH 69) or 35 days before harvest.

Diseases Controlled - Application Timing

Glume Blotch (*Septoria nodorum*) (Wheat) and Septoria Leaf Spot (*Septoria tritici*) (Wheat, triticale). To protect the flag leaf and ear from *Septoria tritici* and *Septoria nodorum* apply CLAYTON OHIO from beginning of stem elongation (BBCH 30) until beginning of flowering (BBCH 61).

Repeated application (winter cereals only) may be necessary where there is a high risk of *Septoria tritici* - see "Resistance management". Clayton Ohio should be applied when the disease is active, but before it is visible on the upper leaves. Applications made once foliar symptoms of *S. tritici* are already present on the upper leaves will be less effective since these symptoms only develop several weeks after initial crop infection has taken place.

Yellow Rust (*Puccinia striiformis*) and Brown Rust (*Puccinia recondita*) (Wheat, triticale, barley and rye)

Apply CLAYTON OHIO at the first signs of disease. Applications made to established infections are likely to be less effective. On winter cereals only a second application may be made 2-3 weeks later, but not before flag leaf extending stage (BBCH 41), if reinfection occurs.

Ear Disease Complex (Wheat)

CLAYTON OHIO applied soon after ear emergence can give a good reduction of Fusarium ear blight and a reduction of sooty moulds (*Alternaria* and *Cladosporium*) and can result in cleaner, brighter ears. CLAYTON OHIO applied between early flowering – end of flowering (BBCH 61-69) gives a good control of Fusarium ear blight. Apply CLAYTON OHIO when conditions for Fusarium infection are favourable.

Fusarium Ear Disease (Triticale)

CLAYTON OHIO applied soon after ear emergence can give a good reduction of Fusarium ear blight. CLAYTON OHIO applied between early flowering – end of flowering (BBCH 61-69) gives a good control of Fusarium ear blight. Apply CLAYTON OHIO when conditions for Fusarium infection are favourable.

Powdery Mildew (*Erysiphe graminis*) (Triticale and rye)

CLAYTON OHIO should be applied at first signs of disease. When treating established mildew or particularly disease susceptible varieties, improved control can be achieved by adding a half dose fenpropimorph formulation in tank mixture. See recommendations made under 'Resistance Management' and 'Compatibility'. On winter cereals only, when disease pressure remains high application may be repeated from flag leaf extending stage (BBCH 41), if necessary - see "Resistance management".

Leaf blotch (*Rhynchosporium secalis*) (Barley, rye).

Apply CLAYTON OHIO at the onset of disease. On winter cereals only for a moderate control of moderate to severe infections a second application may be necessary 2-3 weeks later but not before flag leaf extending stage (BBCH 41). On disease susceptible varieties in high risk situations tank mixing CLAYTON OHIO with other products may improve control. See recommendations made under 'Resistance Management'.

Net blotch (*Pyrenophora teres*) (Barley)

Apply CLAYTON OHIO at the very first signs of disease in spring/early summer. On winter cereals only a second application 2-3 weeks later (but not before flag leaf extending stage (BBCH 41)) will give most effective reduction when conditions remain favourable for disease development. See recommendations made under 'Resistance Management'. When disease develops after flag leaf emergence a single application of CLAYTON OHIO will generally provide good reduction.

Crown Rust (*Puccinia coronata*) (Oats)

Apply CLAYTON OHIO on first appearance of crown rust.

FACTORS AFFECTING CROP SAFETY

Occasionally, after the application of CLAYTON OHIO some transient leaf speckling on wheat or leaf reddening/scorch on oats may occur, but these symptoms have not been shown to adversely affect yield responses accruing from the benefits of disease control.

OILSEED RAPE

CLAYTON OHIO may be used on all varieties of winter or spring sown oilseed rape.

Maximum individual dose: 0.6 litre per hectare.

Maximum 2 applications per crop.

CLAYTON OHIO should be applied in 200-400 l/ha of water, using the higher volume in dense crops.

CLAYTON OHIO may be applied at any time before end of flowering or not less than 56 days before harvest.

Diseases Controlled Phoma Leaf Spot/Stem Canker (*Leptosphaeria maculans*)

Leaf spot can be found from October onwards and best control of stem canker may be expected from an autumn application (BBCH 20-29) applied at first signs of disease, followed by an application from early spring (BBCH 39/65). CLAYTON OHIO programmes applied against light leaf spot will also give a good reduction of leaf spot/stem canker.

Light Leaf Spot (*Pyrenopeziza brassicae*)

Light leaf spot can be found in early spring / summer. Apply CLAYTON OHIO as from onset of stem extension at 0.6 L/ha.

Dark Leaf/Pod Spot (*Alternaria* spp)

Treatment with 0.6 L/ha CLAYTON OHIO should begin at the onset of disease i.e. when black pinhead spots first appear on the pods. Apply CLAYTON OHIO around full flowering (BBCH 65).

Sclerotinia Stem Rot

0.6 L/ha CLAYTON OHIO applied at early to full flowering (BBCH 61-65) will give some reduction of Sclerotinia stem rot.

Ringspot (*Mycosphaerella brassicicola*)

Spring/summer application of CLAYTON OHIO made for light leaf control may also give some reduction of this disease.

FIELD BEANS

Maximum individual dose: 0.6 litre per hectare.

Maximum 1 application per crop.

CLAYTON OHIO should be applied in 200-400 l/ha of water, using the higher volume in dense crops. CLAYTON OHIO must not be applied less than 35 days before harvest.

Diseases Controlled - Application Timing

Chocolate Spot (*Botrytis fabae*) and Bean Rust (*Uromyces fabae*).

CLAYTON OHIO should be applied at first signs of disease as from the early flower stage (BBCH 61).

CABBAGES

Maximum individual dose : 0.6 litre per hectare.

Maximum 1 application per crop.

CLAYTON OHIO should be applied in 200-600 l/ha of water, using the higher volume in dense crops.

CLAYTON OHIO must not be applied less than 21 days before harvest. Consult processor before using CLAYTON OHIO.

Diseases Controlled - Application Timing

Black spot (*Alternaria* spp), Light Leaf Spot (*Pyrenopeziza brassicae*), Powdery Mildew (*Erysiphe cruciferarum*) & Ringspot (*Mycosphaerella brassicicola*).

Best results will be obtained when spraying begins at first signs of disease, but CLAYTON OHIO should not be applied before the beginning of cabbage heart formation.

CARROTS, PARSNIPS AND HORSERADISH

Maximum individual dose: 0.6 litre per hectare.

Maximum 2 applications per crop.

Apply in 300-600 litres of water/ha. Good cover of the foliage is vital; use the higher volume in dense or well grown crops

CLAYTON OHIO must not be applied less than 35 days before harvest.

Diseases Controlled - Application Timing

***Alternaria* spp (Carrots and horseradish).** To reduce *Alternaria* infection on the leaves begin a programme of CLAYTON OHIO sprays with an application in early/mid-August, or when first signs of disease appear on the foliage always after crop stage BBCH 40. Up to 1 further application may be made at 3-week interval.

Powdery Mildew (Carrots, parsnips).

CLAYTON OHIO gives a useful reduction of powdery mildew if applied when the disease is first seen in the crop, but applied after crop stage BBCH 40. A follow-up application may be made if necessary, after 14-21 days.

Sclerotinia (Carrots)

A programme of CLAYTON OHIO sprays applied against *Alternaria* spp can also provide a useful reduction in *Sclerotinia* infection.

SWEDES AND TURNIPS

Maximum individual dose: 0.6 litre per hectare.

Maximum 1 application per crop.

CLAYTON OHIO should be applied in 200-600 l/ha of water, using the higher volume in dense crops.

CLAYTON OHIO must not be applied less than 35 days before harvest.

Consult processor before using CLAYTON OHIO.

Diseases Controlled - Application Timing

Powdery Mildew (*Erysiphe cruciferarum*). Application of CLAYTON OHIO at first signs of disease will give good control. However, do not apply CLAYTON OHIO before a root diameter of 2.5 cm has been reached.

MIXING

Thoroughly shake the pack before use.

Add the required quantity of CLAYTON OHIO to the half-filled spray tank with the agitation system in operation and then fill to the required level.

Continue agitation at all times during spraying and stoppages until the tank is @completely empty. Spray immediately after mixing.

Where tank mixes are used CLAYTON OHIO should be added to the spray tank last, after first dispersing the other product(s), unless otherwise specified.

On emptying the container, RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washing to sprayer at time of filling and dispose of container safely.

HARVEST INTERVAL

Before the end of flowering stage or 35 days before harvest for wheat, triticale, barley, rye and oats.

Before end of flowering or 56 days before harvest for oilseed rape.

Not less than 21 days before harvest for cabbages;

Not less than 35 days before harvest for field beans, carrots, parsnips and horseradish, swedes and turnips.

SPRAY TANK CLEANING

A triple rinse procedure for the tank is recommended:

1. Immediately after spraying, drain tank completely. Wash any contamination off the outside of the sprayer with clean water.
2. Rinse the inside of the tank with clean water and flush at least one tenth of the spray tank volume through the boom and hoses. Drain tank completely.
3. Repeat Step 2 twice.

COMPATIBILITY

CLAYTON OHIO may be applied as a tank-mix with a range of products. Contact your advisor or supplier for compatibility information on specific tank-mixes.

Full manufacturer's instructions must be followed for each tank-mix component.

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