# CLAYTON OZARK

A suspension concentrate containing 250 g/litre (23.1% w/w) of azoxystrobin.

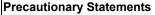
A broad spectrum fungicide for wheat, barley, oats, rye, triticale, combining peas, fresh peas (vining peas, garden pea, mange tout, sugar snaps), fresh beans (broad beans, green beans), field beans, lupins, bulb onions, garlic, shallots, leeks, carrots, asparagus, potatoes, oilseed rape, cabbage, cauliflower, Brussels sprouts, kale (winter greens), collard (spring greens), broccoli, calabrese, outdoor and protected crops of strawberry, outdoor and protected crops of lettuce, endive (including frisee, escarole), chicory (radicchio). MAPP19392

> CLAYTON OZARK is a suspension concentrate containing 250 g/litre (23.1% w/w) of azoxystrobin

Signal Word: WARNING

Harmful if inhaled.

Very toxic to aquatic life with long lasting effects.



Avoid breathing dust/fumes/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/ doctor if you feel unwell. 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.

Contains 1,2-benzisothiazol-3-one. May produce an allergic reaction

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 work.

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: xx Le

Batch No:

PROTECT FROM FROST

SHAKE THOROUGHLY BEFORE USE

UN3082

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/HORTICULTURAL FUNGICIDE										
Crops	Maximum Individual	Maximum number of	Minimum spray	Latest Time of						
	Dose (product/ha	treatments per crop	interval (days)	Application						
Wheat, rye and triticale	1	2	14	Before watery ripe stage (GS 71)						
Barley, oats	1	2	14	Before beginning of flowering (GS 61)						
Peas – combining	1	2	14	35 days before harvest						
Fresh Peas (vining, garden pea, sugar snap, mange tout)	1	2	14	14 days before harvest						



Broad beans	1	2	14	14 days before harvest
Fresh Beans (green bean)	1	2	14	7 days before harvest
Field Beans, lupins	1	2	21	35 days before harvest
Bulb onions, garlic, shallots	1	3	7	14 days before harvest
Leeks	1	3	12	21 days before harvest
Carrots	1	3	7	14 days before harvest
Asparagus (outdoor)	1	2	10	Before senescence
**Brussels sprout, Cabbage, cauliflower, kale (winter greens), collards (spring greens), broccoli and calabrese – all outdoor	1	2	12	14 days before harvest
Strawberries (outdoor and protected)	1	3	7	3 days before harvest
**Lettuce, endive (including frisee, escarole), chicory (radicchio), (outdoor and protected)	1	2	7	14 days before harvest
Potato (in-furrow)	3	1	-	At planting, applied as an in-furrow treatment
Potato (foliar spray)	0.5	3	7	7 days before harvest
Winter and Spring Oilseed rape	1	2	21	21 days before harvest

**Other Specific Restrictions:** To reduce the risk of resistance developing in target diseases the total number of applications of product containing QoI fungicides made to any cereal crop must not exceed two.

When used in a protected situation other than "permanent protection with full enclosure", aquatic buffer zones in line with LERAP requirements 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 PROTECTIONS PRODUCTS.

## **SAFETY PRECAUTIONS Operator protection**

WASH SPLASHES from skin or eyes immediately.

DO NOT BREATHE SPRAY.

WASH HANDS AND EXPOSED SKIN before meals and after work.

## **Environmental protection**

Avoid drift on to non-target plants.

To protect aquatic life, for uses on crops broccoli, calabrese, Brussel sprouts, cabbage, cauliflower, collards, lettuce and kale, the maximum total dose applied must not exceed 500 g azoxystrobin per hectare per year.

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 waterbody, unless a Local Environmental 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.

DO NOT ALLOW DIRECT SPRAY from hand held sprayers to fall within 1 m of the top of the bank of a static or flowing waterbody. 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



<sup>\*\*</sup>A maximum total dose of 500g azoxystrobin must not be exceeded within a 12 month period on the same field.

CRD published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for inspection for three years.

### 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. The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work. In case of toxic or transport emergency ring +44 (0)1484 538444 any time

#### **DIRECTIONS FOR USE**

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

#### **GENERAL INFORMATION**

CLAYTON OZARK contains azoxystrobin, a broad spectrum fungicide from the strobilurin group. It has systemic, translaminar and protectant properties.

Azoxystrobin inhibits fungal respiration. Its mode of action is different from the action of other fungicidal groups. It should always be used in mixture with fungicides with other modes of action.

CLAYTON OZARK shows good crop safety, disease control and maintenance of green leaf area which result in significant yield benefits.

CLAYTON OZARK is best used as a protective treatment or during early stages of disease establishment. In cereals, the length of disease control is generally about four to six weeks during the period of active stem elongation, but can be more when applied at flag leaf/ear emergence.

CLAYTON OZARK is approved for application to wheat, barley, oats, rye, triticale, combining peas, fresh peas (vining peas, garden pea, mange tout, sugar snaps), fresh beans (broad beans, green beans), field beans, lupins, bulb onions, garlic, shallots, leeks, carrots, asparagus, potatoes, oilseed rape, cabbage, cauliflower, Brussels sprouts, kale (winter greens), collard (spring greens), broccoli, calabrese, outdoor and protected crops of strawberry, outdoor and protected crops of lettuce, endive (including frisee, escarole), chicory (radicchio).

#### RESTRICTIONS

Certain apple varieties are highly sensitive to CLAYTON OZARK. As a precaution CLAYTON OZARK should not be applied when there is a risk of spray drift onto neighbouring apple crops. Spray equipment used to apply CLAYTON OZARK to other crops should not be used to treat apples.

Apply CLAYTON OZARK under good growing conditions with adequate soil moisture. Avoid poor growing conditions which may give less reliable results.

# **CROP SPECIFIC INFORMATION CROPS**

CLAYTON OZARK is approved for application to wheat, barley, oats, rye, triticale, combining peas, fresh peas (vining peas, garden pea, mange tout, sugar snaps), fresh beans (broad beans, green beans), field beans, bulb onions, garlic, shallots, leeks, carrots, asparagus, potatoes, oilseed rape, cabbage, cauliflower, Brussels sprouts, kale (winter greens), collard (spring greens), broccoli, calabrese, outdoor and protected crops of strawberry, outdoor and protected crops of lettuce, endive (including frisee, escarole), chicory (radicchio.

#### **DISEASES CONTROLLED**

Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans Rust (Uromyces fabae)  Lupins Rust (Uromyces spp.) – Qualified Use Recommendation		
Brown Rust (Puccinia recondita) Ear Diseases (Cladosporium, Alternaria). Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Barley Net Blotch (Pyrenophora teres) Brown Rust (Puccinia hordei) Leaf Blotch (Rhynchosporium secalis) – reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Oats Crown Rust (Puccinia coronata)  Rye and Triticale Brown Rust (Puccinia recondita) Leaf Blotch (Rhynchosporium secalis) - reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans Downy mildew (Perenospora viciae) - reduction Leaf and Pod Spot (Ascochyta pisi) – useful When CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans Rust (Uromyces spp.) – Qualified Use Recommendation	Wheat	Glume Blotch (Leptosphaeria (syn. Septoria) nodorum)
Ear Diseases (Cladosporium, Alternaria). Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Barley Net Blotch (Pyrenophora teres) Brown Rust (Puccinia hordei) Leaf Blotch (Rhynchosporium secalis) – reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Oats Crown Rust (Puccinia coronata)  Brown Rust (Puccinia recondita) Leaf Blotch (Rhynchosporium secalis) - reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans Downy mildew (Perenospora viciae) - reduction Leaf and Pod Spot (Ascochyta pisi) – useful When CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans Rust (Uromyces spp.) – Qualified Use Recommendation		Yellow Rust (Puccinia striiformis)
Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Barley  Net Blotch (Pyrenophora teres) Brown Rust (Puccinia hordei) Leaf Blotch (Rhynchosporium secalis) – reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Oats  Crown Rust (Puccinia coronata)  Brown Rust (Puccinia recondita) Leaf Blotch (Rhynchosporium secalis) - reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans  Downy mildew (Perenospora viciae) - reduction Leaf and Pod Spot (Ascochyta pisi) – useful When CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans  Rust (Uromyces spp.) – Qualified Use Recommendation		Brown Rust (Puccinia recondita)
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Leaf Blotch (Rhynchosporium secalis) – reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Oats Crown Rust (Puccinia coronata)  Brown Rust (Puccinia recondita) Leaf Blotch (Rhynchosporium secalis) - reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans Downy mildew (Perenospora viciae) - reduction Leaf and Pod Spot (Ascochyta pisi) – useful When CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans Rust (Uromyces fabae)  Lupins Rust (Uromyces spp.) – Qualified Use Recommendation	Barley	Net Blotch (Pyrenophora teres)
Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Oats  Crown Rust (Puccinia coronata)  Brown Rust (Puccinia recondita)  Leaf Blotch (Rhynchosporium secalis) - reduction  Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas,  Garden Peas, Sugar Snap, Mange  Tout, Green Beans  Downy mildew (Perenospora viciae) - reduction  Leaf and Pod Spot (Ascochyta pisi) – useful  When CLAYTON OZARK is used to control leaf and pod spot, some control of  Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans  Rust (Uromyces fabae)  Lupins  Rust (Uromyces spp.) – Qualified Use Recommendation		Brown Rust (Puccinia hordei)
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Rye and Triticale  Brown Rust (Puccinia recondita)  Leaf Blotch (Rhynchosporium secalis) - reduction  Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans  Tout, Green Beans  Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Downy mildew (Perenospora viciae) - reduction  Leaf and Pod Spot (Ascochyta pisi) – useful  When CLAYTON OZARK is used to control leaf and pod spot, some control of  Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans  Rust (Uromyces fabae)  Rust (Uromyces spp.) – Qualified Use Recommendation		Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)
Leaf Blotch (Rhynchosporium secalis) - reduction Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)  Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans  ClayTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans  Rust (Uromyces fabae)  Rust (Uromyces spp.) – Qualified Use Recommendation	Oats	Crown Rust (Puccinia coronata)
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Combining Peas, Vining Peas, Garden Peas, Sugar Snap, Mange Tout, Green Beans  Carden Peas, Sugar Snap, Mange Tout, Green Beans  Carden Peas, Sugar Snap, Mange Tout, Green Beans  Carden Peas, Sugar Snap, Mange When CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Rust (Uromyces fabae)  Rust (Uromyces spp.) – Qualified Use Recommendation		Leaf Blotch (Rhynchosporium secalis) - reduction
Garden Peas, Sugar Snap, Mange Tout, Green Beans Leaf and Pod Spot (Ascochyta pisi) – useful When CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved Field Beans and Broad Beans Rust (Uromyces fabae) Lupins Rust (Uromyces spp.) – Qualified Use Recommendation		Can reduce the severity of Take-all (Gaeumannomyces graminis var. Tritici)
Tout, Green BeansWhen CLAYTON OZARK is used to control leaf and pod spot, some control of Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achievedField Beans and Broad BeansRust (Uromyces fabae)LupinsRust (Uromyces spp.) – Qualified Use Recommendation	Combining Peas, Vining Peas,	Downy mildew (Perenospora viciae) - reduction
Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved  Field Beans and Broad Beans Rust (Uromyces fabae)  Lupins Rust (Uromyces spp.) – Qualified Use Recommendation	Garden Peas, Sugar Snap, Mange	Leaf and Pod Spot (Ascochyta pisi) – useful
Field Beans and Broad Beans Rust (Uromyces fabae)  Lupins Rust (Uromyces spp.) – Qualified Use Recommendation	Tout, Green Beans	When CLAYTON OZARK is used to control leaf and pod spot, some control of
Lupins Rust (Uromyces spp.) – Qualified Use Recommendation		Grey Mould (Botrytis cinerea) and Mycosphaerella blight may be achieved
	Field Beans and Broad Beans	Rust (Uromyces fabae)
Bulb Onions. Shallots and Garlic Downy mildew (Peronospora destructor) - moderate	Lupins	Rust (Uromyces spp.) – Qualified Use Recommendation
, , , , , , , , , , , , , , , , , , , ,	Bulb Onions, Shallots and Garlic	Downy mildew (Peronospora destructor) - moderate



Leeks	Leaf rust (Puccinia porri)
	Purple blotch (Alternaria porri) - moderate
	· · · · · · · · · · · · · · · · · · ·
	White tip (Phytophthora porri) - moderate
Carrots	Alternaria leaf blight (Alternaria dauci) Powdery
	mildew (Erysiphe polygoni)
Asparagus	Stemphylium (Stemphylium botryosum) Rust
	(Puccinia asparagi)
Brussels Sprouts, Cabbage,	For moderate control of: White blister (Albugo candida)
Cauliflower, Kale (Winter Greens),	Ring spot (Mycosphaerella brassicicola)
Collards (Spring Greens), Broccoli	Alternaria (Alternaria brassicae and Alternaria brassicicola)
and Calabrese	
Strawberry	Powdery mildew (Podosphaera macularis) - moderate
	Anthracnose (Colletotrichum acutatum) – Qualified Use recommendation
Lettuce, Endive (Frisse and	Downy mildew (Bremia spp.)
Escarole), Chicory (Raddichio)	
Potatoes	Stem canker and Black scurf (Rhizoctonia solani) – reduction in furrow only
	Black dot (Colletotrichum coccodes) – reduction in furrow only
	Early blight (Alternaria solani) - moderate control foliar use only
Oilseed rape	Dark Leaf and Pod Spot (Alternaria spp.)
	Sclerotinia stem rot (S. sclerotiorum) - moderate control

# WINTER & SPRING WHEAT, WINTER AND SPRING BARLEY, WINTER AND SPRING OATS, RYE & TRITICALE Timing

Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stages of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.

Winter and spring wheat, rye and triticale can be treated from BBCH 30 -69.

Winter and spring barley and winter and spring oats can be treated from BBCH 30-59.

For protection against ear disease (Cladosporium and Alternaria) apply CLAYTON OZARK at ear emergence. When used to control the listed foliar diseases, CLAYTON OZARK applied at the first or second node stage of the crop can reduce the severity of Take-all infection.

# Rate Of Use

1.0 L/ha. The maximum number of applications to any cereal crop is two per crop Tank

#### Mixing

On cereal crops, CLAYTON OZARK must <u>always</u> be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control.

## **Resistance Management**

Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action. Do not apply more than two foliar applications of Qol-containing products to any cereal crop.

Disease control may be reduced if strains of other pathogens less sensitive to azoxystrobin develop.

On cereal crops, CLAYTON OZARK must always be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control.

Users should refer to current FRAG-UK guidelines for Qol compounds.

# PEAS (COMBINING AND FRESH), GREEN BEANS, BROAD BEAN, LUPIN Timing

CLAYTON OZARK should always be used at the first sign of disease infection or when a predictive assessment shows conditions favourable for disease development from BBCH 17-72. For optimum disease control apply CLAYTON OZARK before infection or as soon as disease is first seen in the crop.

Always inspect crops to assess disease development immediately before spraying.

Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.

# Rate Of Use

1.0 L/ha. A second treatment may be required if disease pressure remains high – especially in combining peas. A minimum interval of 14 days must be observed between applications.

# **Peas For Processing**

Where a crop of peas is destined for processing, consult your processor before treating with CLAYTON OZARK. (One year's results indicate that no taints were detected on quick frozen, canned, vining or canned combining peas)

## **Crop Safety**

CLAYTON OZARK shows good crop safety on combining peas and fresh peas. Before applying ensure the crop is free from any stress caused by environment or agronomic effects. Check wax level if necessary using the Crystal Violet test.



#### **Resistance Management**

To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for QoI compounds. Do not make more than two applications of CLAYTON OZARK.

## **FIELD BEANS Timing**

Before applying CLAYTON OZARK, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying.

Best results will be achieved from applications made in the earliest stage of disease development from BBCH 60-69 or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems. A second treatment may be required if disease pressure remains high.

A minimum interval of 21 days must be observed between applications.

#### Rate Of Use

1 L/ha

## **Resistance Management**

To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for QoI compounds. Do not make more than two applications of CLAYTON OZARK to crops of field beans. Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

# **BULB ONIONS, LEEKS AND CARROTS Timing**

Before applying CLAYTON OZARK, ensure the crop is free from any stress caused by environmental or agronomic effects. For optimum disease control CLAYTON OZARK should be used at the first sign of disease infection or preferably preventatively when a predictive assessment shows conditions favourable for disease development. Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems. Bulb onions, garlic and shallots can be treated from BBCH 14-48 Leeks can be treated from BBCH 16 – 48 Carrots can be treated from BBCH 16 - 49 Rate Of Use: 1.0 L/ha.

Bulb Onion • For optimum downy mildew control in bulb onions, garlic and shallot a 7 to 10 day spray interval should be maintained • Applications to established downy mildew infection are unlikely to give reliable control

### **Processing**

Where a crop is destined for processing, consult your processor before treating with CLAYTON OZARK Resistance Management Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action. To avoid the likelihood of resistance developing, applications of CLAYTON OZARK should be made with due regard to current FRAC guidelines for QoI compounds as illustrated below in the following table:

arrent 118 to galacimes for der compounds as mastated bolow in the following table.												
Total number of	1	2	3	4	5	6	7	8	9	10	11	=>12
fungicide spray												
applications per crop												
Maximum	1	1	2	2	2	2	2	3	3	3	3	4
recommended solo												
QoI fungicide sprays												
Maximum	1	2	2	2	2	3	3	4	4	4	4	4
recommended Qol												
fungicide sprays in												
mixture												

No more than 3 applications of CLAYTON OZARK are permitted per crop. Refer to the FRAC website for updates on recommendations for resistance management.

# **ASPARAGUS (OUTDOOR) Timing**

Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stages of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems. Asparagus can be treated from BBCH 41 – 89. Earliest time of application:

After commercial cutting CLAYTON OZARK may only be applied after the harvest season (i.e. after commercial cutting). Where a new 'bed' is established, do not treat within three weeks of transplanting out the crowns. A minimum interval of 10 days must be observed between applications.

Latest time of application:

Until the end of September or before the crop senescence, whichever is sooner.

CLAYTON OZARK shows good crop safety on asparagus. Before applying ensure the crop is free from any stress caused by environmental or agronomic effects.

Rate Of Use 1.0 L/ha.

# **Resistance Management**

CLAYTON OZARK contains azoxystrobin a member of the Qol cross resistance group. CLAYTON OZARK should be used preventatively and should not be relied on for its curative potential. Disease control may be reduced if strains of pathogens less sensitive to azoxystrobin develop.



To avoid the likelihood of resistance developing, applications of CLAYTON OZARK should be made with due regard to current FRAC guidelines for QoI compounds as illustrated below in the following table:

Total number of fungicide spray applications per crop	1	2	3	4	5	6	7	=> 8
Maximum recommended solo Qol fungicide sprays	1	1	2	2	2	2	2	3
Maximum recommended Qol fungicide sprays in mixture	1	2	2	2	2	3	3	3

No more than 2 applications of CLAYTON OZARK are permitted per crop. Refer to the FRAC website for updates on recommendations for resistance management.

## **POTATOES**

# FOLIAR APPLICATION For the control of early blight (Alternaria solani). Timing

Before applying CLAYTON OZARK, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying.

Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.

Potatoes can be treated from BBCH 51-85

A minimum interval of 7 days must be observed between applications.

Rate of Use 0.5 L/ha. A total of 3 applications can be made per season if disease pressure remains high.

### **Potatoes for Processing**

Where a crop of potatoes is destined for processing, consult processors before treating with CLAYTON OZARK.

## **Resistance Management**

The risk of resistance developing to CLAYTON OZARK in Alternaria solani is considered to be moderate. To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for Qol compounds. Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

## **IN-FURROW APPLICATION Timing**

CLAYTON OZARK must be applied as an in-furrow application made at the time of planting for the reduction of Stem canker, Black scurf (Rhizoctonia solani) and Black dot (Colletotrichum coccodes).

Where CLAYTON OZARK is applied as an in-furrow application, it is important to direct the spray into the planting furrow and not onto the seed tuber. Application should ensure that the CLAYTON OZARK is applied to soil around the tuber.

Rate Of Use For in-furrow application made at planting : 3 L/ha. A maximum of one application per crop should be made.

# **Advisory Information**

With in-furrow application, always target the soil and not the seed tuber in order to minimise any possible delay in emergence. Wherever possible, use properly chitted seed or cold-stored seed which has not started to sprout. Using seed which has just broken dormancy may well result in emergence delays.

Using CLAYTON OZARK following earlier applications of imazalil, pencycuron or imazalil/pencycuron is likely to lead to a check in the speed of crop emergence. Effects are usually, but not always, outgrown.

**Effects of soil type** Do not use CLAYTON OZARK on high organic matter soils as the product will not be effective. **Potatoes For Processing** 

Where a crop of potatoes is destined for processing, consult processors before treating with CLAYTON OZARK.

## **Resistance Management**

The risk of resistance developing to CLAYTON OZARK in Rhizoctonia solani (Black scurf and Stem canker) and Colletotrichum coccodes (Black dot) is considered to be very low. CLAYTON OZARK should only be used in potato crops, which adhere to good rotation practices.

To avoid the likelihood of resistance developing to QoI compounds used to control potato late blight, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for QoI compounds. If an application of CLAYTON OZARK is made, no more than two further QoI treatments should be applied sequentially as the first sprays against late blight before using an alternative product.

## WINTER AND SPRING OILSEED RAPE Timing

Before applying CLAYTON OZARK, ensure the crop is free from any stress caused by environmental or agronomic effects. Best results will be achieved from applications made as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems. Oilseed rape can be treated from BBCH 60-69. A second treatment may be required if disease pressure remains high

**Sclerotinia** – CLAYTON OZARK should be applied as a protectant spray during flowering. The optimum timing is early flowering to mid flowering (GS60 – GS65)

**Alternaria** – Apply CLAYTON OZARK as a protective spray at early pod formation when the first ten pods are longer than 4 cm, before they become knobbly and not later than the time the first spots are seen on the pods.



Note: an application of CLAYTON OZARK against Sclerotinia will significantly limit the development of Alternaria Rate Of Use 1 L/ha

**Resistance Management** To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for Qol compounds. Do not make more than two applications of CLAYTON OZARK to crops of oilseed rape. Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

# BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, KALE (WINTER GREENS), COLLARDS (SPRING GREENS), BROCCOLI AND CALABRESE Timing

Before applying CLAYTON OZARK, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying.

Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.

Brassicas can be treated from BBCH 16-49.

A second treatment may be required if disease pressure remains high. A minimum interval of 12 days must be observed between applications to brassicae.

Rate Of Use 1 L/ha. A maximum total dose of 500g azoxystrobin must not be exceeded within a 12 month period on the same field.

**Resistance Management** To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for Qol compound. Do not apply more than a total of two applications of CLAYTON OZARK to any brassica crop.

# OUTDOOR AND PROTECTED LETTUCE, ENDIVE (INCLUDING FRISEE AND ESCAROLE), CHICORY (RADICCHIO) Timing

Before applying CLAYTON OZARK, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems. Lettuce, Endive (including frisee and escarole), and chicory (radicchio) can be treated from BBCH 14 -49.

A minimum interval of 7 days must be observed between applications for both protected and outdoor uses.

Rate of Use 1.0 L/ha. A maximum total dose of 500g azoxystrobin must not be exceeded within a 12 month period on the same field

Resistance Management Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control including, where appropriate, other fungicides with a different mode of action. To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for QoI compounds. Do not apply more than a total of two applications, when used as part of a programme.

# **OUTDOOR AND PROTECTED STRAWBERRY Timing**

For optimum results apply CLAYTON OZARK as a protectant spray at the beginning of flowering. Two further applications can be made if disease pressure remains high. Application should be made in sequence with other products as part of a fungicide programme during flowering at a minimum interval of 7 days. Strawberries can be treated from BBCH 51-89.

A minimum interval of 7 days must be observed between applications to all strawberry crops.

#### Rate of Use 1.0 L/ha.

**Processing** Where a crop is destined for processing, consult your processor before treating with CLAYTON OZARK. **Resistance Management** 

Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

To avoid the likelihood of resistance developing, applications of CLAYTON OZARK should be made with due regard to current FRAC guidelines for QoI compounds as illustrated below in the following table:

Total number of fungicide spray	1	2	3	4	5	6	7
applications per crop							
Maximum recommended solo Qol	1	1	2	2	2	2	2
fungicide sprays							
Maximum recommended QoI fungicide	1	2	2	2	2	3	3
sprays in mixture							

No more than 3 applications of CLAYTON OZARK are permitted per crop.

## **QUALIFIED USE RECOMMENDATION Strawberries and Lupins**

The following uses are supported by a limited amount of effectiveness data which indicate that the use of Clayton Ozark at 1.0 l/ha may provide some useful activity against Rust (Uromyces spp.) on Lupins and Anthracnose (Collectotrichum acutatum) on strawberries.



#### **MIXING AND SPRAYING**

Ensure that the sprayer is clean and correctly set to give an even application at the required volume. Half-fill the spray tank with clean water and start agitation. Shake the container and add the required amount of CLAYTON OZARK to the sprayer using a filling device (e.g. induction bowl or closed transfer unit) or by direct addition to the sprayer tank.

Wash out containers thoroughly, preferably using an integrated pressure rinsing device, or manually rinse three times. Add washings to the sprayer at the time of filling.

Complete filling to the required volume and continue to agitate throughout the spraying operation.

Do not leave the spray liquid in the sprayer for long periods (such as during meal breaks or overnight).

## **VOLUME OF WATER AND SPRAYING OUTDOOR CROPS**

Apply using a medium quality spray (BCPC) at a pressure of at least 2 bar. Apply through conventional crop spraying equipment calibrated to give an even application at the correct volume.

Strawberries: Apply in at least 300 litres of water per hectare

Brussels sprouts, cabbage, cauliflower, kale (winter greens), collards (spring greens), broccoli, calabrese:

Apply in at least 250 litre of water per hectare

Green beans, broad beans: Apply in at least 150 litres of water per hectare

Lettuce and associated crops: Apply in at least 300 litres of water per hectare

Cereals, combining peas, fresh peas, field beans, lupins, oilseed rape, carrots, leek, bulb onions, garlic and shallots: Apply in at least 200 litres of water per hectare. In dense crops, increase the water volume to improve coverage

**Asparagus:** For conventional tractor mounted crop spraying equipment, apply in at least 600 litres of water per hectare using a medium quality sprayer (BCPC) at a pressure of at least 2 bar.

For hand-held spraying equipment, apply in at least 200 litres of water per hectare.

**Potatoes In-furrow application use:** Apply between 50-150 litres of water per hectare. Apply using specialist infurrow application equipment. Contact your supplier or adviser for further details on suitable manufacturers of these sprayers. **Potatoes foliar application:** Apply in at least 200 litres of water per hectare.

#### **INDOOR CROPS**

Application should be made via a hydraulic nozzle applicator e.g. motorised sprayer with hand or boom lance or via a knapsack sprayer.

**Lettuce and associated crops**: Apply in at least 300 litres of water per hectare **Strawberry**:

Apply in at least 100 litres of water per hectare

### **AFTER SPRAYING**

Thoroughly wash out sprayer according to manufacturer's guidelines and dispose of washing and clean containers according to DEFRA Code of Practice and local water authority guidelines.

## **COMPANY ADVISORY INFORMATION**

This information is not part of the approved label under the Plant Protection Product Regulations (2003) but provides additional Company advice on the product use.

**Good Field Practice** Clayton Plant Protection Ltd recommend the following precautions should also be observed: • Wear appropriate clothing - coveralls and protective gloves, when handling the concentrate.

**Agricultural Practice Integrated Crop Management** Laboratory data indicate that when used as directed CLAYTON OZARK has no adverse effects on the following beneficial species.

Earthworm (Eisenia fetida); Bees (Apis and Bombus spp.); Parasitic Wasps (Trichogramma cacoeciae, Aphidis spp. and Encarsia formosa); Aphid Predators (Coccinella septempuncata, Chrysoperia carnea, Episyrphus balteatus); Predatory mites (Phytoseiulus persimilis, Amblyseius degenerans); Spider (Pardosa spp.); Predatory bugs (Macrolophus caliginosus, Orius laevigatus); Carabid Beetle (Poecilus cupreus).

**Resistance Management** CLAYTON OZARK contains azoxystrobin a member of the Qol cross resistance group. CLAYTON OZARK should be used preventatively and should not be relied on for its curative potential. Disease control may be reduced if strains of pathogens less sensitive to azoxystrobin develop.

Use CLAYTON OZARK as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

To avoid the likelihood of resistance developing, application of CLAYTON OZARK should be made with due regard to current FRAG-UK guidelines for QoI compound

This product is to be used only in accordance with the recommendations and instructions given on the labels provided with this pack.

