

TIOCAN®

AN EMULSIFIABLE CONCENTRATE FORMULATION CONTAINING 250G/L (25% W/W) PROTHIOCONAZOLE

5L e

FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE FOR PROFESSIONAL USE ONLY

For use only as an agricultural fungicide for the control of stem-base, foliar and ear disease in winter and spring wheat (also reduction of the mycotoxin deoxynivalenol), durum wheat, triticale, winter rye, winter and spring barley, winter and spring oats and for disease control in winter oilseed rape.

Batch no.:	See container
Registration holder:	Rivere Scientific Ltd, Berkeley Square House, Berkeley Square, London, W1J 6BD, United Kingdom
UFI Code:	6300-P0FP-100H-GG7E
Phone no.:	+49 (0) 40 44195761
Emergency no.:	In the event of emergency, call the National Poisons Information Centre, Beaumont Hospital at 01 809 2566 or 01 809 2166 or 01 837 9964

SAFETY INFORMATION



WARNING

Causes serious eye irritation.
May cause respiratory irritation.
Very toxic to aquatic life with long lasting effects.

Contains prothioconazole.
May produce an allergic reaction.

Wear protective gloves/protective clothing/eye protection/ face protection.

IF EXPOSED or CONCERNED: Immediately call a POISON CENTER or doctor/physician.

Protect from sunlight.

IF ON SKIN: Wash with soap and water.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do - continue rinsing.

Collect spillage.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty 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.

PCS No: 06997

Safety precautions

Operator protection:

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

- Wear protective gloves/protective clothing/eye protection/face protection.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician and show the container or label.
- In case of accident or if you feel unwell seek medical advice immediately (show label where possible).

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 of 5m to surface water bodies.

Storage and disposal:

- KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.
- WASH OUT CONTAINER THOROUGHLY by manually rinsing three times or using an integrated pressure rinsing device, empty washings into spray tank and dispose of safely. Triple rinsed containers should be punctured to prevent re-use and may be disposed of by an authorised contractor.
- DO NOT RE-USE CONTAINER for any purpose and dispose of safely.
- Keep away from food, drink and animal feeding stuffs.
- Keep out of reach of children.
- SHAKE WELL BEFORE USE.
- PROTECT FROM FROST.
- STORE IN A COOL DRY PLACE. READ ALL INSTRUCTIONS CAREFULLY BEFORE USE.

If exposed or if you feel unwell seek medical advice immediately (show the label where possible).

No specific antidote is available.

Treat symptomatically.

In case of accident, call the 24-hour National Poisons Information Centre:

Tel.: +353 (0)1 809 2566 or +353 (0) 1 837 9964.

General information:

- Sprayers should be cleaned thoroughly before use, and filters and jets checked for damage/blockages.
- Boom height should be adjusted to ensure even coverage of the crop, particularly at later growth stages. The correct height is one at which the spray from alternate nozzles meets just above the crop, in dense crops, at later growth stages, higher water volumes should be used.
- Spray equipment should be thoroughly cleaned with detergent after use.

Instructions for use:

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE			
Crop	Max. single dose	Max. total dose	Latest time of application
Winter and spring wheat, durum wheat, winter rye and triticale	0.8 L/ha	2.4 L/ha	Before grain milky ripe stage (GS 71)
Winter and spring barley, winter and spring oats	0.8 L/ha	1.6 L/ha	Before beginning of flowering (GS 61)
Winter oilseed rape	0.7 L/ha	1.4 L/ha	Up to a pre-harvest interval of 56 days

IMPORTANT:

This information is approved as part of the Product Label. To use this product safely and effectively, all of the instructions in this section must be followed carefully.

Tiocan® is a triazolinthione fungicide recommended for control of a broad range of diseases in winter and spring barley, winter and spring wheat, durum wheat, triticale, winter rye, winter and spring oats and for disease control in winter oilseed rape.

Method of application:

Tractor mounted/trailed horizontal boom sprayer. A spray pressure of 2-3 bar is recommended. Apply **Tiocan®** in 100 – 300 litres per hectare water. Reducing water volumes, where good spray coverage is difficult to attain, may risk disease control. Apply as a medium spray quality. When the crop is dense or disease pressure/risk is severe, higher spray volumes are advised to achieve good penetration to the lower leaves and stem bases.

Diseases controlled:

Eyespot (*Oculimacula* spp.)

Tiocan® reduces the incidence and severity of eyespot. Spray in the Spring at the first sign of disease, when the leaf sheaths begin to become erect until the 2nd node is detectable (GS 30-32).

Septoria Leaf Spot (*Mycosphaerella graminicola*) and Glume Blotch (*Stagonospora nodorum*)

Apply before disease is established in the crop. To protect the upper leaves and ear apply **Tiocan®** at full flag leaf emergences (GS 37) up to mid-flowering (GS 65). Where disease pressure remains elevated application may be repeated. Control levels may be enhanced by using robust rates of application. Applications to upper leaves where *S. tritici* symptoms are present are less likely to be effective.

Powdery Mildew (*Blumeria graminis*)

Apply **Tiocan®** at the first signs of disease. A second application may be made 2-3 weeks later if re-infection occurs. Applications made to established infections are likely to be less effective.

Yellow Rust

Apply **Tiocan®** at the first signs of disease. A second application may be made 2-3 weeks later if re-infection occurs. Applications made to established infections are less likely to be effective.

Brown Rust

Apply **Tiocan®** at the first signs of disease. A second application may be made 2-3 weeks later if re-infection occurs. Applications made to established infections are likely to be less effective.

Crown Rust (*Puccinia coronata*)

Apply **Tiocan®** at the first sign of disease. A second application may be made 2-3 weeks later if re-infection occurs. Applications made to established infections are less likely to be effective.

Tan spot (*Pyrenophora tritici-repentis*)

Apply **Tiocan®** at the first signs of disease in Spring or early Summer. Where disease pressure remains elevated application may be repeated.

Ear Disease Complex (*Fusarium ear blight and sooty moulds*)

Apply **Tiocan®** soon after ear emergence until the end of flowering (GS59-69). Control of ear diseases can result in cleaner, brighter ears.

Through the reduction of ear blight, **Tiocan®** effectively reduces the level of the *Fusarium* mycotoxin deoxynivalenol (DON) in wheat grain. However, where *Fusarium* levels are high, the reduction achieved may not always be sufficient to ensure that DON levels fall below the statutory limit.

Leaf Blotch (*Rhynchosporium secalis*)

Apply **Tiocan®** in Spring at the first signs of disease. For severe infections a second application may be necessary 2-3 weeks later.

Net Blotch (*Pyrenophora teres*)

Apply **Tiocan®** at the first signs of disease in Spring/early Summer. For severe infections, a second application 2-3 weeks later will give most effective control when conditions remain favourable for disease development.

Winter Oilseed Rape	Oilseed Rape
Light leaf spot	MC
Phoma leaf spot/stem canker	C
<i>Sclerotinia</i> stem rot	C

C = control MC = moderate control

Tiocan® can also be used on all varieties of spring oilseed rape but crop safety has not been fully established.

Light Leaf Spot

Apply **Tiocan®** in Autumn/Winter (typically late October to early December) protectively. Follow up spray(s) may be necessary in early Spring from the onset of stem elongation, depending on disease development.

Phoma Leaf spot/Stem Canker

Apply **Tiocan®** in Autumn at the first sign of disease. Repeat application in late Autumn/Winter, if disease symptoms reoccur.

Sclerotinia stem rot (*Sclerotinia sclerotiorum*)

Apply **Tiocan®** at early to full flower.

Resistance strategy:

Repeated application of **Tiocan®** alone, should not be used on the same crop against a high risk pathogen such as cereal powdery mildew. 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.

Take all precautionary measures to reduce the selection pressure or sensitive *Septoria tritici* strains (e.g., tank mix with product having a different mode of action which is active against *Septoria*). Consult your advisor for up to date guidance regarding current resistance status and a strategy for preventing and managing resistance in the cereal and oilseed rape pathogens listed on the label.

The Fungicide Resistance Action Committee (FRAC) produces recommendations that may be consulted for additional information.

Strains of light leaf spot resistant to azole fungicides are known to exist. To avoid development of resistance apply product protectively in response to disease forecasts. Where possible, when light leaf spot is present, avoid the use of azole based fungicides when targeting other diseases such as Sclerotinia at mid flowering.

CAUTION: The potential development of disease strains resistant to **Tiocan®** cannot be excluded or predicted. **Tiocan®** is unlikely to provide satisfactory control in the presence of such resistant strains.

Mixing: Thoroughly shake the pack before use. Add the necessary quantity of **Tiocan®** 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 the spraying and stoppages until the tank is completely empty. Spray directly after mixing.

Spray quality: Apply **Tiocan®** as a MEDIUM spray as defined by the BCPC system.

Specific Diseases Controlled

Cereals	Wheat	Barley	Oats	Rye	Triticale
Eyespot (<i>Oculimacula spp.</i>)	R	R	R	R	R
Septoria Leaf Spot (<i>Mycosphaerella graminicola</i>)	C	-	-	C	C
Glume Blotch (<i>Stagonospora nodorum</i>)	C	-	-	C	-
Powdery Mildew (<i>Blumeria graminis</i>)	C	C	C	C	C
Yellow Rust	C	C	-	-	C
Brown Rust	MC	C	-	C	C
Crown Rust (<i>Puccinia coronata</i>)	-	-	C	-	-
Tan spot (<i>Pyrenophora tritici-repentis</i>)	MC	-	-	-	-
Fusarium Ear blight	MC	MC	-	-	-
Rhynchosporium Leaf blotch	-	C	-	C	C
Net blotch	-	C	-	-	-