

## PROTENDO 250 EC

An emulsifiable concentrate formulation containing 250 g/L prothioconazole (24.75% w/w).

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.

### RISK AND SAFETY INFORMATION

**Causes serious eye irritation.**

**May cause respiratory irritation.**

**Very toxic to aquatic life with long lasting effects.**



**WARNING**

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.

Repeated exposure may cause skin dryness or cracking.

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.

Contains 2-[2-(1-chlorocyclopropyl)-2-hydroxy-3-phenylpropyl]-2,4-dihydro-3H-1,2,4-triazole-3-thione. May produce an allergic reaction.

**To avoid risks to human health and the environment, comply with the instructions for use.**

**PCS No. 06251**

**IMPORTANT INFORMATION**

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crop	Maximum individual dose (L/ha)	Maximum Total Dose (per season)	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	Before beginning of side shoot development (GS 21)

**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.**

**FOR PROFESSIONAL USE ONLY**

For 24 hour emergency information contact Globachem n.v. Telephone: +32 11 78 57 17

**Registration holder:  
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**Contents:  
1 L e**

**Batch No: see bottle**

**SAFETY PRECAUTIONS**

**OPERATOR PROTECTION**

If swallowed, seek medical advice immediately and show this 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**

Do not re-use container for any other purpose and dispose of safely.  
Keep away from food, drink and animal feeding stuffs.  
Keep out of reach of children.  
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.

Triple rinsed containers should be punctured to prevent re-use and may be disposed of by an authorised contractor.

PROTECT FROM FROST

STORE IN A COOL DRY PLACE

READ ALL INSTRUCTIONS CAREFULLY BEFORE USE

## 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

PROTENDO 250 EC is a triazolinthione fungicide recommended for control of a wide range of diseases on 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.

### DISEASES CONTROLLED

CEREALS	Wheat	Barley	Oats	Rye	Triticale
Eyespot ( <i>Oculimacula</i> spp.)	R	R	R	R	R
Septoria Leaf Blotch ( <i>Mycosphaerella graminicola</i> )	MC	-	-	MC	MC
Glume Blotch ( <i>Stagonospora nodorum</i> )	MC	-	-	MC	-
Powdery Mildew ( <i>Blumeria graminis</i> )	C	C	C	C	C
Yellow rust	C	C	-	-	C
Brown rust	MC	C	-	C	C
Crown rust	-	-	C	-	-
Tan spot	MC	-	-	-	-
<i>Fusarium</i> ear blight	MC	MC	-	-	-
Rhynchosporium Leaf Blotch	-	C	-	C	C
Net Blotch	-	C	-	-	-
C = control    MC = moderate control    R = reduction					

#### Eyespot (*Oculimacula* spp.)

PROTENDO 250 EC reduces the incidence and severity of eyespot. Spray in the spring at the first sign of disease, from when the leaf sheaths begin to become erect until the 2nd node is detectable (GS 30-32).

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

Apply before disease is established in the crop. To protect the upper leaves and ear apply PROTENDO 250 EC at full flag leaf emergence (GS 37) up to mid-flowering (GS 65). Where disease pressure remains high 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 likely to be less effective.

#### Powdery Mildew (*Blumeria graminis*)

Apply PROTENDO 250 EC at the first signs of disease. Where disease pressure remains high application may be repeated.

**Yellow Rust (*Puccinia striiformis*)**

Apply PROTENDO 250 EC 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.

**Brown Rust**

Apply PROTENDO 250 EC 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 PROTENDO 250 EC 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.

**Tan Spot (*Pyrenophora tritici-repentis*)**

Apply PROTENDO 250 EC at the first signs of disease in spring or early summer. Where disease pressure remains high application may be repeated.

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

Apply PROTENDO 250 EC 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, PROTENDO 250 EC 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.

***Rhynchosporium* Leaf Blotch**

Apply PROTENDO 250 EC 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 PROTENDO 250 EC 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
<i>Phoma</i> Leaf spot/Stem Canker	C
<i>Sclerotinia</i> stem rot	C
C = control      MC = moderate control	

**Light Leaf Spot**

Apply PROTENDO 250 EC in autumn/winter (usually late October to early December) protectively. Follow up spray(s) may be required in early spring from the onset of stem elongation, depending on disease development.

***Phoma* Leaf spot/Stem Canker**

Apply PROTENDO 250 EC in autumn at the first sign of disease. Repeat application in late autumn/winter, if disease symptoms reoccur.

***Sclerotinia* stem rot (*Sclerotinia sclerotiorum*)**

Apply PROTENDO 250 EC at early to full flower.

## RESISTANCE STRATEGY

Repeated application of PROTENDO 250 EC 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 for insensitive *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 stage.

**Caution:** The possible development of disease strains resistant to PROTENDO 250 EC cannot be excluded or predicted. Where such resistant strains occur, PROTENDO 250 EC is unlikely to give satisfactory control.

## CROP SPECIFIC INFORMATION

PROTENDO 250 EC may be used on all commercial varieties of winter and spring barley, winter and spring wheat, durum wheat, triticale, winter rye, winter and spring oats and winter oilseed rape.

### Cereals

Method of application: Tractor mounted/trailed sprayer.

Apply PROTENDO 250 EC at 0.8 L/ha in 100-300 L water/ha.

Apply as a MEDIUM spray quality. A spray pressure of 2-3 bar is recommended. Maximum total dose per crop is 1.6 L/ha for barley and oats and 2.4 L/ha for wheat and rye. PROTENDO 250 EC may be applied at any stage before grain milky ripe stage (GS 71) in winter wheat and winter rye and up to beginning of flowering in barley and oats (GS 61).

### Winter Oilseed Rape

Method of application: Tractor mounted/trailed sprayer.

Apply PROTENDO 250 EC at 0.7 L/ha in 100-300 L water/ha.

Apply as a MEDIUM spray quality. A spray pressure of 2-3 bar is recommended. Maximum total dose per crop is 1.4 L/ha. PROTENDO 250 EC may be applied at any stage before beginning of side shoot development (GS 21).

Apply PROTENDO 250 EC in 100 to 300 litres of water per hectare. The higher spray volumes are recommended where the crop is dense or disease pressure / risk is high to ensure good penetration to the lower leaves and stem bases. Disease control may be compromised by reducing water volumes, where good spray coverage is difficult to achieve.

## MIXING AND SPRAYING

Thoroughly shake the pack before use. Add the required quantity of PROTENDO 250 EC 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. Sprayers should be thoroughly cleaned before use, and filters and jets checked for damage and 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.

## **COMPATABILITY**

Follow the manufacturer's recommendations for the application of tank mix products.

## **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. 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.