



# FIREFLY®

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## Fungicide

**An Agricultural fungicide for the control of stem-base, foliar and ear diseases in winter wheat and winter rye**

An emulsifiable concentrate formulation containing 100 g/L prothioconazole and 50 g/L fluoxastrobin.

For professional use only

Authorisation holder:  
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Safety information

### **FIREFLY**

Contains 100 g/L prothioconazole and 50 g/L fluoxastrobin



### **Warning**

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

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

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.

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

**PCS No. 06284**



## SAFETY PRECAUTIONS

### Operator Protection

Wear suitable protective clothing and gloves during mixing, loading and application.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### 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 5 m to surface water bodies.

### 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. Do not re-use container for any purpose.

PROTECT FROM FROST

STORE IN A COOL DRY PLACE

READ ALL INSTRUCTIONS CAREFULLY BEFORE USE



fireflysds

To access the **Safety Data Sheet** for this product scan the code or use the link below:

[www.bayercropscience.ie/sds/firefly.pdf](http://www.bayercropscience.ie/sds/firefly.pdf)

or alternatively contact your supplier

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## 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.

Firefly is a mixture of a strobilurin and a triazolinthione fungicide recommended for control of a wide range of diseases on winter wheat and winter rye.

### RATE OF USE

Crops	Maximum individual dose	Maximum total dose	Latest time of application
Winter wheat and winter rye	1.5 litres product per hectare	3.0 litres product per hectare	At any stage before grain milky ripe stage (GS 71)

Method of application: Tractor mounted sprayer

A spray pressure of 2-3 bar is recommended. Apply Firefly in 200-300 litres per hectare water.

Apply as a medium spray quality.

### DISEASES CONTROLLED

Disease	Wheat	Rye
Eyespot ( <i>Oculimacula spp.</i> )	R	R
Brown Rust	C	C
Yellow Rust	C	C
Powdery Mildew ( <i>Blumeria graminis</i> )	C	C
Fusarium Ear blight	R	R
Tan spot	MC	-
Rhynchosporium	-	C

#### Wheat

Eyespot (reduction of the incidence and severity), powdery mildew, yellow rust, brown rust, tan spot, ear disease (reduction of Fusarium ear blight).

#### Rye

Eyespot (reduction of the incidence and severity), powdery mildew, brown rust, Rhynchosporium.

## **APPLICATION TIMING**

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

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).

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

When used for the control of other diseases, Firefly will also give control of wheat powdery mildew.

Strains of wheat and barley powdery mildew resistant to QoI fungicides are common in Ireland. Control of wheat powdery mildew can only be relied upon from the triazole component of Firefly. Where specific control of wheat mildew is required, this should be achieved through a programme of measures, including products with recommendations for control of mildew that contain different active substances used in mixture or sequence.

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

Apply Firefly 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 (*P. recondita*)**

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

### **Ear Disease Complex**

Apply Firefly soon after ear emergence until the end of flowering (GS 59-69). Control of ear diseases can result in cleaner, brighter ears.

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

## **MANAGEMENT STRATEGY TO MINIMISE THE LIKELIHOOD OF RESISTANCE**

Apply fungicides according to manufacturer's recommendations for the target disease (or complex) at the specific crop growth stage indicated. Effective disease management is a critical parameter in delaying the build-up of resistant pathogen populations. Firefly is a mixture of two fungicides with different modes of action, a strobilurin and a triazolinthione.

Firefly contains fluoxastrobin, a member of the QoI cross-resistance group. Firefly should be used preventatively and should not be relied on for its curative potential.

**Use Firefly 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. You must not apply more than two foliar applications of QoI-containing products to any cereal crop.**

Use of fungicides which have different modes of action have been shown to protect against the development of resistant forms of disease.

A programme of sprays should not include more than 2 sprays of Firefly or any other product that contains a strobilurin fungicide.

## **FACTORS AFFECTING CROP SAFETY**

Occasionally, after the application of Firefly, some transient leaf chlorosis on wheat may occur, but these symptoms have not been shown to adversely affect yield responses accruing from the benefits of disease control.

## **CROP SPECIFIC INFORMATION**

Firefly may be used on all commercial varieties of winter wheat and winter rye.

### **Mixing**

Thoroughly shake the pack before use.

Add the required quantity of Firefly 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.

### **General**

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.



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