GB85838032h rA2e

Fungicide

PROLINE® 275

A triazolinthione fungicide for the control of stem-base, foliar and ear disease in winter and spring wheat (also reduction of the mycotoxin deoxynivalenol), Durum wheat, winter rye, winter and spring barley, winter and spring oats and for disease control in winter oilseed rape.

An emulsifiable concentrate formulation containing 275 g/L (27.5% w/w) prothioconazole

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

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GROUP 3 FUNGICIDE

MAPP 14790 F

Shake Well

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PROLINE[275]

UFI: 6DQ3-E0EK-9004-VQ83

Contains 275 g/L (27.5% w/w) prothioconazole and N,N,-Dimethyl decanamide.

Warning

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

Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: call a POISON CENTER/doctor/physician.
Protect from sunlight.

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.

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.

IMPORTANT INFORMATION FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crops:	Winter and spring wheat, Durum wheat, winter rye, winter and spring barley, winter and spring oats and winter oilseed rape.
Maximum individual dose:	**Cereals:** 0.72 L product/ha **Oilseed rape:** 0.63 L product/ha
Maximum total dose:	**Wheat & rye (winter), Durum wheat:** 2.16 L product/ha **Barley:** 1.44 L product/ha **Oats:** 1.44 L product/ha **Oilseed rape:** 1.26 L product/ha
Latest time of application:	**Wheat & rye (winter), Durum wheat:** before grain milky ripe stage **Barley and oats:** Up to beginning of flowering. **Oilseed rape:** 56 days before harvest

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.

To access the **Safety Data Sheet** for this product scan the code or use the link below:
https://cropscience.bayer.co.uk/our-products/fungicides/proline-275
or alternatively contact your supplier

Bayer

SAFETY PRECAUTIONS

Operator Protection

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

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying the product

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE

GLOVES when handling contaminated surfaces.

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

WHEN USING DO NOT EAT DRINK OR SMOKE

WASH ANY CONTAMINATION from eyes immediately

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

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).

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 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.
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

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank and dispose of safely.

DO NOT RE-USE CONTAINER for any purpose.

PROTECT FROM FROST

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.

DISEASES CONTROLLED

Wheat

Eyespot, *Septoria* (leaf and glume blotch), powdery mildew, yellow rust, brown rust*, tan spot*, ear disease complex – *Fusarium* ear blight* (reduction of deoxynivalenol) and reduction of sooty moulds.

Barley

Eyespot, powdery mildew, yellow rust, brown rust, ear disease complex – *Fusarium* ear blight* and reduction of sooty moulds, *Rhynchosporium* and net blotch.

Rye

Eyespot, powdery mildew, brown rust and *Rhynchosporium*.

Oats

Eyespot, crown rust and mildew.

Winter oil seed rape

Light leaf spot*, *Phoma* leaf spot and Stem canker and *Sclerotinia* stem rot.

*Proline[275] will provide moderate control of these diseases

CEREALS

Eyespot *(Tapesia 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).

Septoria* Leaf Blotch and Glume Blotch *(Septoria tritici* and *Stagonospora nodorum)

Apply before disease is established in the crop. To protect the upper leaves and ear apply Proline[275] at full flag leaf emergence (GS 37) up to mid-flowering (GS 65). Where disease pressure remains high application may be repeated. Applications to upper leaves where *S. tritici* symptoms are present are likely to be less effective.

Proline[275] contains a DMI fungicide. Resistance to some DMI fungicides has been identified in *Septoria* leaf blotch *(Mycosphaerella graminicola)* 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 FRAG-UK website.

Powdery Mildew *(Blumaria graminis)*
Apply Proline[275] at the first signs of disease. Where disease pressure remains high application may be repeated.

Yellow Rust *(Puccinia striiformis)*
Apply Proline[275] at the first signs of disease. Proline[275] controls yellow rust in wheat and winter barley. 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 Proline[275] at the first signs of disease. Proline[275] controls brown rust in barley *(Puccinia hordei)* and rye *(P. recondita)* and will give moderate control of brown rust in wheat *(P. recondita)*. 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 Proline[275] at the first signs of disease. Proline[275] controls crown rust in winter and spring oats. 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 Proline[275] at the first signs of disease in spring/early summer. Proline[275] will give moderate control of tan spot in winter wheat. Where disease pressure remains high application may be repeated.

Ear Disease Complex
Apply Proline275 soon after ear emergence until the end of flowering (GS 59-69) for moderate control of *Fusarium* ear blight and reduction of sooty moulds. Control of ear diseases can result in cleaner, brighter ears.

Through the reduction of ear blight, Proline[275] 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)*
Proline[275] gives high levels of *Rhynchosporium* control. Apply Proline[275] 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 Proline[275] 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

Light Leaf Spot
Apply Proline[275] 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 Proline[275] in autumn at the first sign of disease. Repeat application in late autumn/winter, if disease symptoms reoccur.

Sclerotinia stem rot *(Sclerotinia sclerotiorum)*
Apply Proline[275] at early to full flower

Spring oilseed rape (QUALIFIED MINOR USE RECOMMENDATION)
Proline[275] can also be used on varieties of spring oilseed rape but crop safety has not been fully established.

RESISTANCE
Repeated application of Proline[275] 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. The possible development of disease strains resistant to Proline[275] cannot be excluded or predicted. Where such resistant strains occur, Proline[275] is unlikely to give satisfactory control.

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.

CROP SPECIFIC INFORMATION

Cereals
Apply Proline[275] at 0.72 L/ha in 100–300 L water/ha. Apply as a **MEDIUM** spray quality (as defined by BCPC). A spray pressure of 2–3 bar is recommended. Maximum total dose per crop is 1.44 L/ha for barley and oats and 2.16 L/ha for wheat and rye. Proline[275] 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.

Winter Oilseed Rape
Apply Proline[275] at 0.63L/ha in 100–300 L water/ha. Apply as a **MEDIUM** spray quality (as defined by BCPC). A spray pressure of 2–3 bar is recommended. Maximum total dose per crop is 1.26 L/ha. Proline[275] may be applied at any stage up to a pre harvest interval of 56 days.

Apply Proline[275] 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 maybe 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 Proline[275] 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.