

# SORATEL®

MAPP 19636

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

An emulsifiable concentrate formulation containing 250 g/L (23.1% w/w) prothioconazole.  
Also contains 1-octyl-2-pyrrolidinone.

GROUP 3 FUNGICIDE



ADAMA



Scan for Safety Data Sheet or use weblink:  
<https://bit.ly/3sRK2eb>



FR R3.0.4 FEB21

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## Danger

**Harmful if swallowed.**

**Causes severe skin burns and eye damage.**

**May cause an allergic skin reaction**  
**Very toxic to aquatic life with long lasting effects.**

Keep out of reach of children.

Do not breathe vapours/spray.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

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

IF SWALLOWED: Rinse mouth. Call a POISON CENTRE or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Wash contaminated clothing before reuse. 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.**

L205641PFR

# SORATEL®

## MAPP 19636

### SHAKE WELL BEFORE USE

### PROTECT FROM FROST

### DIRECTIONS FOR USE:

full instructions in this leaflet.

Batch No.: see packaging

**Adama Agricultural Solutions UK Ltd**

Third Floor East, 1410 Arlington Business Park, Theale, Reading RG7 4SA

**Telephone:** 01635 860555 | **Technical Helpline:** 01635 876622

**www.adama.com | ukenquiries@adama.com**

**For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333**

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

OPEN HERE ►

## 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), 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 that they provide an equal or higher standard of protection.

### 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 HSE'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 FEEDINGSTUFFS.

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.

LERAP  
B

## IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE

**Crops:** Winter & spring wheat, winter & spring barley, winter & spring oats, winter rye and winter oilseed rape.

**Maximum individual dose (L product/ha)**

**Maximum total dose (Ha/season)**

**Latest time of application**

Full details are given in the information box within this leaflet.

**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.**

BK/R3.0.4 FEB21

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## This leaflet is part of the approved label.

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## IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crop	Maximum individual dose	Maximum total dose	Latest time of application
Winter and spring wheat, winter rye	0.8 litres product per hectare	2.4 litres product per hectare per season	Before grain milky ripe stage (GS 70)
Winter and spring barley, winter and spring oats	0.8 litres product per hectare	1.6 litres product per hectare per season	Before beginning of flowering (GS 61)
Winter oilseed rape	0.7 litres product per hectare	1.4 litres product per hectare per season	Full flowering (BBCH 65) (PHI 56 days)

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### Storage and Disposal

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**WASH OUT CONTAINER THOROUGHLY**, empty washings into spray tank and dispose of safely. **DO NOT RE-USE CONTAINER** for any purpose.

## 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.

SORATEL® is a triazolinthione fungicide recommended for control of a wide range of diseases on winter and spring barley, winter and spring wheat, winter rye, winter and spring oats and for disease control in winter oilseed rape.

## RESISTANCE

Repeated application of SORATEL 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 SORATEL cannot be excluded or predicted. Where such resistant strains occur, SORATEL 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.

SORATEL contains a DMI fungicide. Resistance to some DMI fungicides has been identified in *Septoria* leaf blotch (*Zymoseptoria tritici*) 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.

## 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 oilseed rape

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

\*SORATEL will provide moderate control of these diseases.

## Cereals

Apply as a MEDIUM spray quality (as defined by BCPC).

### Eyespot (*Tapesia* spp.)

Spray in the spring at the first sign of disease, from when the leaf sheaths begin to become erect until the second node is detectable (GS 30-32).

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

Apply before disease is established in the crop. To protect the upper leaves and ear, apply SORATEL 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 *Z. tritici* symptoms are present are likely to be less effective.

### Powdery Mildew (*Blumaria graminis*)

Apply SORATEL at the first signs of disease. Where disease pressure remains high, application may be repeated.

### Yellow Rust (*Puccinia striiformis*)

Apply SORATEL at the first signs of disease. SORATEL 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 SORATEL at the first signs of disease. SORATEL 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 SORATEL at the first signs of disease. SORATEL 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 SORATEL at the first signs of disease in spring/early summer. SORATEL will give moderate control of tan spot in winter wheat. Where disease pressure remains high, application may be repeated.

### Ear Disease Complex

Apply SORATEL 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, SORATEL 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*)

SORATEL gives high levels of *Rhynchosporium* control. Apply SORATEL 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 SORATEL 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

Apply as a MEDIUM spray quality (as defined by BCPC).

### Light Leaf Spot

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

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

Apply SORATEL at early to full flower.

### Spring oilseed rape (QUALIFIED MINOR USE RECOMMENDATION)

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

## **RATE OF USE**

Wheat (winter and spring), rye (winter).

Apply 0.8 L/ha in 100 – 300 L/ha water, from beginning of stem elongation up until before grain milky ripe stage (BBCH 30 – BBCH 70).  
(Max: 2.4 L/ha per season).

Barley (winter and spring), Oats (winter and spring).

Apply 0.8 L/ha in 100 – 300 L/ha water, from beginning of stem elongation, up until the beginning of flowering (BBCH 30 – BBCH 61).  
(Max: 1.6 L/ha per season).

Oilseed Rape (winter).

Apply 0.7 L/ha in 100 – 300 L/ha water, from no side shoots stage up until full flowering (BBCH 20 - BBCH 65).  
Pre harvest interval: 56 days.  
(Max: 1.4 L/ha per season)

SORATEL may be used on all commercial varieties of winter and spring barley, winter and spring wheat, winter rye, winter and spring oats and winter oilseed rape.

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 SORATEL 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.

Crops should not be re-entered until spray residues are dry.

### **DISCLAIMER/CONDITIONS OF SUPPLY**

The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage, handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products. We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.

#### **Marketed by**

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