Sunorg® Pro

MAPP 15433
An emulsifiable concentrate containing 90 g/litre metconazole. A fungicide for the control of a wide range of diseases in winter and spring wheat, durum wheat, winter and spring barley, triticale, rye, oilseed rape, peas, field beans and lupins; and a spring plant growth regulator in oilseed rape.

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

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 GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.
WEAR 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.

IF YOU FEEL UNWELL, seek medical advice immediately (show the label where possible).
WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.
WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental protection
DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container. 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 to surface water bodies in line with LERAP requirements.
DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 metres 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 metre from the top of a ditch which is dry at the time of application.
DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 metre of the top of the bank of a static or flowing water body.

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 OUT OF REACH OF CHILDREN. 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 container safely.
Do not re-use container for any other purpose. PROTECT FROM FROST
DO NOT STORE IN DIRECT SUNLIGHT.

This label is compliant with the CPA Voluntary Initiative Guidance

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Sunorg® Pro
An emulsifiable concentrate containing 90 g/litre metconazole.

Warning
Causes serious eye irritation.
Suspected of damaging the unborn child.
Harmful to aquatic life with long lasting effects.

Wear protective gloves/clothing/eye protection.
Obtain special instructions before use.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Call a POISON CENTRE or doctor/physician.
Store locked up.
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 metconazole and diethylene glycol.

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

IMPORTANT INFORMATION
FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE and PLANT GROWTH REGULATOR, as directed below:

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum Individual Dose</th>
<th>Maximum Total Dose Per Crop</th>
<th>Latest Time of Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter wheat, Spring wheat, Durum wheat, Winter barley, Spring barley, Triticale and Rye</td>
<td>1.0 litre product/ha</td>
<td>2.0 litres product/ha</td>
<td>Up to and including GS 71 (caryopsis watery ripe stage)</td>
</tr>
<tr>
<td>Oilseed rape</td>
<td>0.8 litres product/ha</td>
<td>1.6 litres product/ha</td>
<td>10% of pods at final size</td>
</tr>
<tr>
<td>Combining peas, Vining peas, Field beans and Lupins</td>
<td>0.8 litres product/ha</td>
<td>1.6 litres product/ha</td>
<td>14 days before harvest</td>
</tr>
</tbody>
</table>

Other specific restrictions.
A minimum interval of 14 days must be observed between applications on oilseed rape, peas, beans and lupin.
A minimum interval of 21 days must be observed between applications on cereals.
To protect birds, only one application is allowed on cereals before GS 29 (end of tillering).

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.
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.

Sunorg Pro is a broad spectrum fungicide with curative and protectant activity, which can be used on all commercial varieties of winter and spring wheat, durum wheat, winter and spring barley, triticale and rye. Sunorg Pro can also be used on oilseed rape, field beans, combining and vining peas and lupins. When applied to oilseed rape in the spring, Sunorg Pro can provide plant growth regulation in the form of a reduction in crop height.

Restrictions/Warnings

Do not apply to oilseed rape crops that are damaged or stressed from factors such as previous product use, adverse weather conditions (e.g. drought, frost or waterlogging), nutrient deficiency or pest attacks.

Sunorg Pro is formulated specifically for use on oilseed rape and legumes. The addition of further adjuvants is not advised.

Sunorg Pro should not be applied with pyrethroids to flowering oilseed rape.

Ensure the sprayer is free from previous chemical residues that may harm the crop. Use of a detergent cleaner is advised before and after use.

Avoid spray drift on to neighbouring crops and field margins.

Resistance Management

Sunorg Pro contains metconazole, 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 DMIs contact your agronomist or specialist advisor, and visit the FRAG-UK website.

Cereal Powdery mildew strains with decreased sensitivity to triazoles are common in the UK. Where these occur or develop, Sunorg Pro may not give satisfactory control.

For crop/pathogen situations where repeated spray applications are required, alternation or mixtures with an effective non cross-resistant fungicide are recommended. Fungicide use does not replace the need for non-chemical cultural control methods e.g. resistant crop varieties, good agronomic practice, plant hygiene.
Crop Specific Information

Cereals

Sunorg Pro is a broad spectrum fungicide with curative and protectant activity which can be used on all commercial varieties of winter and spring wheat, durum wheat, winter and spring barley, triticale and rye for disease control as summarised below:

<table>
<thead>
<tr>
<th></th>
<th>Winter wheat</th>
<th>Spring wheat</th>
<th>Durum wheat</th>
<th>Winter barley</th>
<th>Spring barley</th>
<th>Triticale</th>
<th>Rye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Septoria tritici</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Yellow rust</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Brown rust</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Rhynchosporium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Net blotch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MC</td>
</tr>
<tr>
<td>Powdery mildew</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
<td>MC</td>
</tr>
<tr>
<td>Ear Fusarium</td>
<td>GR</td>
<td>GR</td>
<td>GR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C = full control
MC = moderate control
GR = good reduction
R = reduction

Time of Application

Apply as soon as diseases start to develop in the crop and repeat as required.

Application at an early stage of mildew development (not more than 3% infection on any green leaf) will give moderate control. Where mildew has become established, the use of a specific mildewicide will improve control and help prevent the development of resistant strains.

For optimum results on yellow rust apply before any leaf has more than 1% infection or as a preventative treatment on susceptible varieties after the flag leaf has fully emerged (GS 39).

Good reduction of ear Fusarium may be achieved when applied between full ear emergence and anthesis complete (GS 69).

For control of brown rust treat susceptible varieties as soon as rust is seen and spray more resistant varieties before any of the top three leaves have more than 1-2% infection.

Spray as soon as net blotch is seen on any of the top three leaves. A further treatment will be necessary where disease is well established.

Rate of Application

1.0 l/ha
Oilseed rape

All varieties of oilseed rape may be treated.

Disease control
Sunorg Pro provides control of *Alternaria*, and a reduction of phoma leaf spot, phoma stem canker (*Phoma lingam*) and light leaf spot.

<table>
<thead>
<tr>
<th></th>
<th><em>Alternaria</em> spp</th>
<th>Phoma leaf spot &amp; phoma stem canker (<em>Phoma lingam</em>)</th>
<th>Light leaf spot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oilseed rape</td>
<td>Control</td>
<td>Reduction</td>
<td>Reduction</td>
</tr>
</tbody>
</table>

Time of Application
Apply as soon as diseases start to develop, and repeat as required.

Rate of Application
0.8 l/ha.

Crop height reduction
When applied to oilseed rape in the spring, Sunorg Pro can provide plant growth regulation in the form of a reduction in crop height.

Time of Application
Apply during stem extension in the spring, once the oilseed rape crop is actively growing (GS 31-51)

Rate of Application
0.8 l/ha.

Combining Peas, Vining Peas, Field Beans and Lupins

All varieties of peas and field beans may be treated.

Consult processor before using on vining peas grown for processing.

Safety to lupins has not been established. If possible, a small area of the lupin crop should be treated before treating the whole crop.

Disease control
Sunorg Pro can be used for the reduction of *Ascochyta* and *Mycosphaerella* species, the reduction of *Botrytis* and the control of rust on peas.

<table>
<thead>
<tr>
<th></th>
<th><em>Ascochyta</em></th>
<th><em>Mycosphaerella</em></th>
<th><em>Botrytis</em></th>
<th>Rust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combining peas</td>
<td>Reduction</td>
<td>Reduction</td>
<td>Reduction</td>
<td></td>
</tr>
<tr>
<td>Vining peas</td>
<td></td>
<td></td>
<td></td>
<td>Control</td>
</tr>
<tr>
<td>Field beans</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Control</td>
</tr>
</tbody>
</table>
Qualified Minor Use Recommendations

Sunorg Pro can be used for the reduction of *Ascochyta*, the reduction of *Botrytis* and the control of rust on lupins.

<table>
<thead>
<tr>
<th></th>
<th><em>Ascochyta</em></th>
<th><em>Mycosphaerella</em></th>
<th><em>Botrytis</em></th>
<th>Rust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lupins</td>
<td>Reduction</td>
<td>-</td>
<td>Reduction</td>
<td>Control</td>
</tr>
</tbody>
</table>

Time of Application

<table>
<thead>
<tr>
<th></th>
<th><em>Ascochyta</em></th>
<th><em>Mycosphaerella</em></th>
<th><em>Botrytis</em></th>
<th>Rust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combining peas, Vining peas</td>
<td>Start of flowering*</td>
<td>Start of flowering*</td>
<td>Mid flowering*</td>
<td>First sign of rust pustules*</td>
</tr>
<tr>
<td>Field beans</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Start of petal fall*</td>
</tr>
<tr>
<td>Lupins</td>
<td>start of petal fall*</td>
<td>-</td>
<td>Start of petal fall*</td>
<td>Start of petal fall*</td>
</tr>
</tbody>
</table>

* repeat 3-4 weeks later, if required.

Rate of Application

0.8 l/ha.

Following Crops

After treating a cereal, oilseed rape or legume crop with Sunorg Pro, the crops listed below may be sown as a following crop:

- Beans
- Cabbage
- Carrots
- Cereals
- Clover
- Lettuce
- Linseed
- Maize
- Oilseed rape
- Onions
- Peas
- Potatoes
- Ryegrass
- Sugar beet
- Sunflower

The effects of Sunorg Pro on other crops has not been assessed.

Mixing and Application

Mixing

Never prepare more spray solution than is required. Three quarters fill the tank with water and start the agitation. To ensure thorough mixing of the product, invert the container several times before opening. Add the required quantity of Sunorg Pro to the spray tank while re-circulating. Fill up the tank with water and continue agitation until spraying is completed. On emptying the container, rinse container thoroughly by using an integrated pressure rinsing device or manually rinsing three times. Add washings to spray tank at time of filling and dispose of container safely.
Application

In cereals apply Sunorg Pro in 200 to 300 l/ha water.

In oilseed rape and legumes apply Sunorg Pro in 200-400 l/ha water.

Apply as a MEDIUM spray, as defined by BCPC. In dense crops use the higher volume to achieve adequate penetration and good coverage of the crop.

To ensure optimum spray coverage and minimize spray drift, adjust the spray boom to the appropriate height above the crop, according to guidance provided by the sprayer and/or nozzle manufacture.

Sprayers should be thoroughly cleaned out immediately after use.

Qualified approval

Sunorg Pro may be applied in reduced water volumes as specified in the table below, although efficacy at this reduced volume has not been evaluated. Application of this product at reduced-volume is at user’s risk with regard to biological efficacy.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Rate</th>
<th>Minimum water volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter wheat, Spring wheat, Durum wheat, Winter barley, Spring barley, Triticale, Rye</td>
<td>1.0 litres per hectare</td>
<td>110 litres per hectare</td>
</tr>
<tr>
<td>Oilseed rape, Peas, Beans, Lupins</td>
<td>0.8 litres per hectare</td>
<td>90 litres per hectare</td>
</tr>
</tbody>
</table>
The following does not form part of the authorised label text.

With many products there is a general risk of resistance developing to the active ingredients. For this reason a change in activity cannot be ruled out. It is generally impossible to predict with certainty how resistance may develop because there are so many crop and use connected ways of influencing this. We therefore have to exclude liability for damage or loss attributable to any such resistance that may develop. To help minimise any loss in activity the BASF recommended rate should in all events be adhered to.

Numerous, particularly regional or regionally attributable, factors can influence the activity of the product. Examples include weather and soil conditions, crop plant varieties, crop rotation, treatment times, application amounts, admixture with other products, appearance of organisms resistant to active ingredients and spraying techniques. Under particular conditions a change in activity or damage to plants cannot be ruled out. The manufacturer or supplier is therefore unable to accept any liability in such circumstances. All goods supplied by us are of high grade and we believe them to be suitable, but as we cannot exercise control over their mixing or use or the weather conditions during and after application, which may affect the performance of the material, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use; but nothing should be deemed to exclude or restrict any liability upon us which cannot be excluded or restricted under the provisions of the Unfair Contract Terms Act 1977 or any similar applicable law.
Section 6 of the Health and Safety at Work Act

Additional Product Safety Information

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has “off-label” approval or is otherwise permitted under the Plant Protection Products Regulations.

The information on this label is based on the best available information including data from test results.

Safety Data Sheet

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:

bit.ly/Sunorg_Pro_sds

Alternatively, contact your supplier.
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WHEN USING DO NOT EAT, DRINK OR SMOKE.

Environmental protection
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Avoid contamination via drains from farmyards and roads.
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Storage and disposal
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KEEP OUT OF REACH OF CHILDREN.
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 container safely.
Do not re-use container for any other purpose.
PROTECT FROM FROST.
DO NOT STORE IN DIRECT SUNLIGHT.

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Supplied by: BASF plc, Agricultural Solutions
PO Box 4, Earl Road, Cheadle Hulme, CHEADLE,
Cheshire SK8 6QG, Tel: 0161 485 6222
Emergency Information: (24 hours freephone): 0049 180 2273112,
Technical Enquiries: 0845 602 2553 (office hours)