MAPP 16539

A broad-spectrum systemic fungicide for control of Septoria, yellow and brown rust, net blotch (moderate control), Rhynchosporium and powdery mildew in barley, wheat and triticale.

A suspension concentrate formulation containing 50 g/l (4.1% w/w) epoxiconazole and 375 g/l (30.7% w/w) folpet.

Contains folpet and hexamethylene tetramine. May cause an allergic reaction.

Danger

Causes serious eye irritation. Harmful if inhaled. Suspected of causing cancer. May damage the unborn child. Suspected of damaging fertility. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects. Contains folpet and hexamethylene tetramine. May produce an allergic reaction.

Keep out of reach of children. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing vapour or spray.

IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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.
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) 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.

WASH CONCENTRATE from skin immediately.
WASH HANDS AND EXPOSED SKIN before eating or drinking and after work.
IF YOU FEEL UNWELL, seek medical advice immediately (show the 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 to surface water bodies in line with LERAP requirements.

To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies as specified for the crop.

HORIZONTAL BOOM SPRAYERS MUST BE FITTED WITH THREE STAR DRIFT REDUCTION TECHNOLOGY. Low drift spraying equipment must be operated according to the specific conditions stated in the official three star rating for that equipment as published on HSE Chemicals Regulation Division’s website. Maintain three star operating conditions until 30 m from the top of the bank of any surface water bodies.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within the distance specified for the crop to the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water. NOTE: BUFFER ZONES OF MORE THAN 5 M CANNOT BE REDUCED UNDER THE LOCAL ENVIRONMENT RISK ASSESSMENT FOR PESTICIDES (LERAP) SCHEME. The statutory buffer zone must be maintained and the distance recorded in Section A of the LERAP record form. The LERAP record form must be kept available for three years.

Storage and Disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

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 purpose.
A broad-spectrum systemic fungicide for control of *Septoria*, yellow and brown rust, net blotch (moderate control), *Rhynchosporium* and powdery mildew in barley, wheat and triticale.

A suspension concentrate formulation containing 50 g/l (4.1% w/w) epoxiconazole and 375 g/l (30.7% w/w) folpet.

Contains folpet and hexamethylene tetramine. May cause an allergic reaction.

This leaflet is part of the approved label.
For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333.

Danger

Causes serious eye irritation.
Harmful if inhaled.
Suspected of causing cancer.
May damage the unborn child. Suspected of damaging fertility.
Very toxic to aquatic life.
Harmful to aquatic life with long lasting effects.
Contains folpet and hexamethylene tetramine. May produce an allergic reaction.

Keep out of reach of children.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing vapour or spray.
IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
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.
**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) 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. WASH CONCENTRATE from skin immediately. WASH HANDS AND EXPOSED SKIN before eating or drinking and after work. IF YOU FEEL UNWELL, seek medical advice immediately (show the 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 to surface water bodies in line with LERAP requirements.

To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies as specified for the crop. HORIZONTAL BOOM SPRAYERS MUST BE FITTED WITH THREE STAR DRIFT REDUCTION TECHNOLOGY. Low drift spraying equipment must be operated according to the specific conditions stated in the official three star rating for that equipment as published on HSE Chemicals Regulation Division’s website. Maintain three star operating conditions until 30 m from the top of the bank of any surface water bodies.

**IMPORTANT INFORMATION**

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL FUNGICIDE

<table>
<thead>
<tr>
<th>Crop</th>
<th>Maximum individual dose (litres product/ha)</th>
<th>Maximum total dose (litres product /ha/year)</th>
<th>Latest time of application</th>
<th>Aquatic buffer zone distance (metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter and spring wheat, winter and spring barley and triticale</td>
<td>2.0</td>
<td>4.0</td>
<td>Up to and including inflorescence completed (GS 59)</td>
<td>6</td>
</tr>
</tbody>
</table>

Other specific restrictions:
Do not apply by hand-held equipment.

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.
DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within the distance specified for the crop to the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water. NOTE: BUFFER ZONES OF MORE THAN 5 M CANNOT BE REDUCED UNDER THE LOCAL ENVIRONMENT RISK ASSESSMENT FOR PESTICIDES (LERAP) SCHEME.

The statutory buffer zone must be maintained and the distance recorded in Section A of the LERAP record form. The LERAP record form must be kept available for three years.

Storage and Disposal
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.
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 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.

RESTRICTIONS

When applied to barley intended for malting, refer to the latest timing for epoxiconazole given by the British Beer and Pub Association.

Avoid drift onto neighbouring crops, as damage may occur, particularly to broad-leaved plants.

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

RESISTANCE

MANITOBA® contains folpet, a protectant fungicide from the phthalimide chemical group with multi-site contact activity (FRAC code M4) and epoxiconazole, a DMI fungicide (FRAC code G1).

For resistance management purposes, folpet’s mode of action indicates low-risk of resistance without any signs of resistance or cross-resistance developing.

MANITOBA also contains epoxiconazole, 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 Fungicide Resistance Action Group (FRAG) – UK website.

The efficacy of this product may be affected if strains of disease pathogens resistant or less sensitive occur at any time. As such occurrences cannot be predicted no responsibility can be accepted for the results obtained.

Strains of wheat powdery mildew with decreased sensitivity to triazoles are common in the UK. Where these occur or develop, MANITOBA may not give satisfactory control.

For current advice on resistance management contact your agronomist or specialist advisor, and visit the FRAG-UK website.

DISEASES CONTROLLED

Disease Control in wheat, barley and triticale

For the control of leaf spot (Septoria tritici), Septoria nodorum, powdery mildew, yellow and brown rust in winter and spring wheat.

Leaf blotch (Rhynchosporium secalis), net blotch (moderate control), powdery mildew, brown and yellow rust in winter and spring barley.

Powdery mildew, yellow and brown rust, leaf spot (Septoria tritici) and Septoria nodorum in triticale.

MANITOBA may be applied in a programme of two suitably timed sprays.

Effectiveness using three star drift reduction technology may be reduced.

DOSE RATE

2.0 L/ha per application
CROP SPECIFIC INFORMATION
MANITOBA can be safely used on all varieties of wheat, barley and triticale.
For best disease control, apply as soon as disease is seen. This is normally at GS 30-33.
A second spray should be timed to protect new growth from disease this is normally 3-4 weeks after the first application but may be sooner under conditions of rapid growth and high disease pressure.

WATER VOLUME
Apply in 150-200 L water/ha.
Apply as a medium spray as defined by BCPC.

FOLLOWING CROPS
There are no restrictions on following crops.

MIXING AND SPRAYING
Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly calibrated to give an accurate application at the correct volume.
Half-fill sprayer tank with clean water. Add the required amount of MANITOBA to the water and commence agitation. On emptying the container, 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. Add the remainder of the water whilst continuing to agitate the mixture until spraying is complete. Maintain agitation during the mixing process and continue until the spraying is complete. Do not leave in spray tank for long periods without using. Thoroughly rinse application equipment three times with water after use.

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.

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