Topas®

Product registration number: MAPP 16765

Contains 100 g/l penconazole as an emulsifiable concentrate.

For the control of powdery mildew in apples, crab apples, pears, blackcurrants, redcurrants, grapes, outdoor and protected strawberries.

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

This product label is compliant with the CPA Voluntary Initiative (VI) guidance.

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In case of toxic or transport emergency ring +44 (0)1484 538444 any time

PROTECT FROM FROST. STORE IN A COOL, DRY PLACE

1 Litre
TOPAS
TOPAS is an emulsifiable concentrate containing 100 g/l penconazole.

Signal Word
Warning

Hazard
Causes serious eye damage.

Statements
Suspected of damaging the unborn child.

Precautions
Keep out of reach of children.

Toxic to aquatic life with long lasting effects.

Statements
Avoid release to the environment.

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

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: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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.

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

IMPORTANT INFORMATION
FOR USE ONLY AS A FUNGICIDE

For use on:
Crops: Apples, crab apples, pears, blackcurrants, redcurrants, grapes, outdoor and protected strawberries.

Maximum individual dose, Maximum number of treatments, Latest time of application and Other specific restrictions: Full details are given in the Statutory Area on attached 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.

SAFETY PRECAUTIONS
(a) Operator protection
Engineering control of operator exposure must be used where reasonably practicable in addition to the following protective equipment:
WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.
However engineering controls may replace personal protective equipment if COSHH assessment shows that they provide an equal or higher standard of protection.
WASH ALL PROTECTIVE CLOTHING thoroughly after use especially inside of gloves.
WASH CONCENTRATE from skin or eyes immediately.
WASH HANDS AND EXPOSED SKIN before meals and after work.

(b) Environmental protection
RISK TO NON-TARGET INSECTS OR OTHER ARTHROPODS. See Directions for Use.
Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.
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.

(c) 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.
IMPORTANT INFORMATION
FOR USE ONLY AS A FUNGICIDE
For use on:

<table>
<thead>
<tr>
<th>Crops</th>
<th>Maximum Individual Dose (litres product/ha)</th>
<th>Maximum Number of Treatments</th>
<th>Latest time of application (days before harvest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple, pear, crab apple</td>
<td>0.5</td>
<td>3 per year</td>
<td>21</td>
</tr>
<tr>
<td>Blackcurrant (outdoor), redburrant (outdoor)</td>
<td>0.5</td>
<td>2 per year</td>
<td>28</td>
</tr>
<tr>
<td>Strawberry (outdoor)</td>
<td>0.5</td>
<td>2 per crop</td>
<td>3</td>
</tr>
<tr>
<td>Strawberry (protected)</td>
<td>0.5</td>
<td>4 per crop</td>
<td>3</td>
</tr>
<tr>
<td>Table grapes, wine grapes</td>
<td>0.3</td>
<td>3 per year</td>
<td>28</td>
</tr>
</tbody>
</table>

Other specific restrictions:
For the use on grapes, apples, pears and crab apples the spray concentration must not exceed 0.5 L product in 250 L water.
For use on currants the spray concentration must not exceed 0.5 L product in 2000 L water.

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.

This leaflet is part of the approved Product Label.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

Where application in by horizontal boom sprayers: Avoid spraying/application within 5 m of the field boundary to reduce effects on non-target insects or other arthropods.

Where application is by broadcast sprayers: The best available application technique, which minimises off-target drift should be used to reduce effects on non-target insects or other arthropods.

No information on the safety of TOPAS in Integrated Pest Management systems has been provided and therefore safety cannot be assumed.

PROPERTIES OF TOPAS

TOPAS should be used preventatively or in the earliest stages of disease development to minimize risks of resistance. To maintain a high level of protection, applications of TOPAS should not be made consecutively.
but used in alternation with fungicides with different modes of action. Where high infection levels of mildew are present in the crop, use another product to lower the mildew pressure before using TOPAS.

**DISEASES CONTROLLED**

TOPAS is for the control of powdery mildew in apples, crab apples, pears, outdoor blackcurrants and redcurrants, table and wine grapes, outdoor and protected strawberries.

A programme of different powdery mildew fungicides is required for season long control.

**Pome fruit**

*Podosphaera leucotricha*

**Grapes**

*Uncinula necator*

**Currants**

(*Podosphaera mors-uvae*)

**Strawberry**

*Sphaerotheca macularis*

**Integrated Pest Control**

For the latest information consult your specialist advisor. Where insect pests are a problem, a specific insecticide should be used.

**CROP SPECIFIC INFORMATION**

**APPLE, PEAR, CRAB APPLES**

Crop safety on pears has not been tested. Test on a small area prior to large scale application.

TOPAS will reduce the spread of powdery mildew from primary infections and will also control the spread of secondary mildew

**RATE OF USE**

A rate of 0.5 litres/ha should be used for trees of 3 – 3.5m height at full canopy density. Apply in 250 –1500 l/ha of water to ensure good crop cover.

Where tree height and/or canopy density is reduced, the dose (and water volume) should be adjusted in accordance with an appropriate dose adjustment scheme. Consult Syngenta or your specialist advisor for further information. Further information on the PACE scheme is available from HDC, or see the HDC leaflet (Orchard Spraying: Opportunities to reduce rates) available on the CRD website at http://www.pesticides.gov.uk/uploadedfiles/HDC_TreeFruitDosingleaflet.pdf

Always spray to achieve a thorough and even coverage of the foliage as this will maximise the protectant properties of the product.

Where trees are significantly taller than 3.5m height, the efficacy is likely to be reduced.
TOPAS should be applied as a foliar spray from BBCH 71 (fruit size up to 10 mm; fruit fall after flowering). Further applications can be made if disease pressure remains high. A programme of sprays should include not more than 3 sprays of TOPAS in any one season. Allow a minimum of 10 days between applications.

The latest time of application is 21 days before harvest.

PROCESSING
Where the crop is destined for processing, consult your processor before treating with TOPAS.

OUTDOOR AND PROTECTED STRAWBERRY

RATE OF USE
Apply TOPAS at a rate of 0.5 litres product per hectare.

It is important to ensure complete coverage of the plant at all growth stages.

TIMING
For optimum results apply TOPAS preventative or in the earliest stages of disease development but no earlier than the stated growth stage.

Outdoor strawberries
Apply TOPAS from the beginning of stolen/runner formation, visible about 2 cm long (BBCH 41). Further applications can be made if disease pressure remains high. Up to 2 applications may be made in any one season. Allow a minimum of 10 days between applications.

Protected strawberries
Apply TOPAS preventative from the 3rd leaf unfolded stage (BBCH 13). Further applications can be made if disease pressure remains high. Up to 4 applications may be made in any one season. Allow a minimum of 10 days between applications.

The latest time of application for outdoor and protected strawberries is 3 days before harvest.

VOLUME
Apply in 300-2000 litres of water per hectare.

PROCESSING
Where the crop is destined for processing, consult your processor before treating with TOPAS.

BLACKCURRANTS AND REDCURRANTS

TIMING
TOPAS should be used as a protective spray commencing at the first sign of disease (usually mid-late flowering) and continue at 7 day intervals. A further application can be made after harvest to protect plants further. A maximum of 2 applications should be made in any one cropping year.

The latest time of application is 28 days before harvest.
RATE OF USE
TOPAS should be used at the rate of 0.5 litres per hectare.
It is important to ensure complete coverage of the plant at all growth stages.

VOLUME
Apply TOPAS in a minimum water volume of 2000 l/ha to achieve good coverage of the foliage without excessive run off.

PROCESSING
Where the crop is destined for processing, consult your processor before treating with TOPAS.

TABLE AND WINE GRAPES

RATE OF USE
Apply TOPAS at a rate of 0.3 litres product per hectare.
It is important to ensure complete coverage of the plant at all growth stages.

TIMING
Apply TOPAS from the 3rd leaf unfolded stage (BBCH 13). Further applications can be made if disease pressure remains high. Up to 3 applications may be made per crop. Allow a minimum of 8 day between applications.
The latest time of application is 28 days before harvest

VOLUME
Apply in at 200-1000 litres of water per hectare.

PROCESSING
Where the crop is destined for processing, consult your processor before treating with TOPAS.

MIXING AND SPRAYING
For outdoor use apply through conventional crop spraying equipment. Apply using a medium quality spray as defined by BCPC. A spray pressure of at least 2 bar is preferred.
Applications for the protected uses should be made via hydraulic nozzle applicator e.g. motorised sprayer with hand lance or boom lance or knapsack applications.
Make sure the sprayer is set to give an even application at the correct volume.

Fill the spray tank with half the required volume of water and begin agitation. Add the required amount of TOPAS and continue agitation while adding the rest of the water. Agitate the mixture thoroughly before use and continue agitation during spraying. Thoroughly wash all spraying and measuring equipment with water and a wetting agent immediately after use. Do not leave the spray liquid in the sprayer for long periods (such as during meal breaks or overnight).
RESISTANCE
TOPAS contains penconazole, a DMI fungicide. The possible development of disease resistant to TOPAS cannot be excluded or predicted. Disease control may be reduced accordingly if strains of fungi resistant to penconazole develop.

No more than 4 applications of a DMI containing fungicide should be made for the control of powdery mildew in grapes.

COMPANY ADVISORY INFORMATION
[This section is not part of the (EC) 1107/2009 Regulation and provides additional advice on product use at the discretion of the applicant]

Where application is by hand-held sprayer:
Minimise drift away from target area to reduce effects on non-target insects or other arthropods.

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