

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

Fungicide



**PENCONAZOLE 200 EW**

Reg. No. L 7492 Act/Wet No. 36 of/van 1947

1.29/04/04 – Jan2017

*An emulsion oil in water, systemic fungicide for the control of diseases on crops as indicated.*

*'n Emulsie olie in water, sistemiese swamdoder vir die beheer van siektes op gewasse soos aangedui.*

**ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL**

penconazole (triazole) **200 g/l** penkonasool (triasool)

FRAC FUNGICIDE GROUP CODE **3** FRAC SWAMDODER GROEPKODE

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**villa**

Registration holder / Registrasiehouer:  
Universal Crop Protection (Pty) Ltd.  
Co. Reg. No. / Mpy. Reg. Nr. 1983/008184/07  
PO Box / Posbus 801, Kempton Park, 1620  
Tel: 011 396 2233  
Website / Webblad: [www.villacrop.co.za](http://www.villacrop.co.za)

**UN Number: 1993**

Willow Set & Print 011 394-4486



**CAUTION  
VERSIGTIG**



GEBRUIKSAANWYSINGS INGESLUIT

VERWYS NA BESONDERHEDE  
GEDRUK OP HOUER/SAK

Date formulated:  
Formuleringsdatum:

REFER TO DETAILS PRINTED  
ON CONTAINER/BAG

DIRECTIONS FOR USE ENCLOSED

Batch number:  
Lotnommer:

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**UNIVERSAL CROP PROTECTION (PTY) LTD.**

Co. Reg. No. 1983/008184/07 Mpy. Reg. Nr.

P.O. Box / Posbus 801, KEMPTON PARK, 1620

Tel. (011) 396 2233

**CAUTION / VERSIGTIG****WARNINGS****Withholding periods:**

<b>Minimum number of days between the last application and harvest or feeding:</b>	
Apples and Pears	14 days
Peas	7 days
Peas (green fodder)	14 days
Cucurbits	7 days
Table and Wine grapes	14 days

**NOTE**

**ABOVE-MENTIONED WITHHOLDING PERIODS REFER TO COMPLIANCE WITH LOCAL MAXIMUM RESIDUE LIMITS (MRL'S). HOWEVER, IT IS IMPORTANT TO NOTE THAT IMPORT TOLERANCES OF OTHER COUNTRIES MIGHT POSSIBLY BE EXCEEDED. IF THE TREATED CROP WILL BE EXPORTED, FIRST CONSULT THE RELEVANT IMPORTER OR EXPORTING BODY REGARDING THE USE OF THIS PRODUCT, MRL'S AND RECOMMENDED WITHHOLDING PERIODS.**

- Handle with care.
- Harmful if swallowed, inhaled or absorbed through the skin.
- Irritating to skin and eyes.
- Toxic to fish and aquatic life.
- **Flammable** – keep away from open flames.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

**Aerial application**

Notify all inhabitants in the immediate vicinity of the lands to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the disease to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.**

**PRECAUTIONS**

- Avoid inhalation of the spray mist.
- Avoid contact with skin and eyes.
- Wear a face shield and rubber gloves when mixing, handling the concentrate and during application.
- Wash contaminated clothing after use.

- Wash with soap and water after use or after accidental skin contact.
- In case of eye contact, immediately flush the eyes with clean, cold water for 15 to 20 minutes, holding the eyelid(s) open. If irritation persists, seek medical advice.
- Do not eat, drink or smoke whilst applying, mixing or before washing hands and face or change of clothing.
- Do not spray or allow drift of spray onto other crops, grazing, rivers, dams and areas not under treatment or to nearby water sources.
- Clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- **TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of one third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.
- Destroy the empty container by perforation and flattening.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

### **RESISTANCE WARNING**

**PENCONAZOLE 200 EW** is a group code 3 fungicide. Any fungus population may contain individuals naturally resistant to **PENCONAZOLE 200 EW** and any other group code 3 fungicide. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **PENCONAZOLE 200 EW** or any other group code 3 fungicide.

To delay fungicide resistance:

- avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with products from different fungicide group codes,
- for tank mixing or alternation with products in fungicide group code M, refer to applicable individual product labels,
- integrate other control methods (chemical, cultural, biological) into disease control programmes.

For specific information on resistance management contact the registration holder of this product.

### **USE RESTRICTIONS**

- For more effective control of Scab, it is recommended to apply **PENCONAZOLE 200 EW** always in combination with a non-related broad-spectrum fungicide. Refer to “**APPLICATION RATES**”.
- Above-mentioned combinations are recommended for a preventative spray programme, in areas where, and also during periods when conditions favour the development of Scab.
- It is recommended to change to a preventative programme with contact fungicides during December.

### **DIRECTIONS FOR USE: Only use as indicated.**

#### **Compatibility:**

- The compatibility of **PENCONAZOLE 200 EW** with other products may be influenced. As changing factors may vary, a physical compatibility test must always be performed prior to application of such a tank mixture.
- When **PENCONAZOLE 200 EW** is used in combination with any other agricultural remedy, all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhere to.

#### **Mixing instructions:**

- Add the quantity of **PENCONAZOLE 200 EW** required to a sufficient volume of water in the spray tank to obtain a homogeneous emulsion.
- Agitate well and then add the remaining water volume to the spray tank. Ensure continuous agitation during mixing and application.
- If a wettable powder is to be sprayed in mixture with the **PENCONAZOLE 200 EW**, the wettable powder must be added first to the spray tank (pre-creamed), ensuring agitation, where after the **PENCONAZOLE 200 EW** is added and the spray tank then filled to the final volume with water.
- For mistblowers and air assisted sprayers: Fill the spray tank up to one third of the required volume with water.
- Add the required quantity of product to the spray tank while agitating the water.
- Ensure continuous agitation during mixing and application.

- If a tank mixture is made with another product, wettable powders, or granules and also suspension concentrate formulations must be added to the water, prior to adding **PENCONAZOLE 200 EW**. In the case of other liquid formulations, the **PENCONAZOLE 200 EW** can be added first to the spray tank and after it has dispersed completely, can the other formulations be added.
- Fill the spray tank to its final volume with water, whilst continuously agitating.

### **APPLICATION INSTRUCTIONS**

#### **Ground application:**

**PENCONAZOLE 200 EW** can be applied with conventional high volume ground spraying equipment. It is important to ensure that the spray equipment is calibrated prior to application, to ensure that the correct dosage is distributed evenly over the target area.

#### **Aerial application:**

Aerial application of **PENCONAZOLE 200 EW** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Volume: A spray mixture volume of 30 litres per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: 25 to 35 droplets per cm<sup>2</sup> must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 280 to 300 micron is recommended. Limit the production of fine droplets, less than 150 micron (high drift and evaporation potential), to a minimum.
- Flying height: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft is diving, climbing or when banking.
- Use suitable atomizers equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
  - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
  - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

**APPLICATION RATES**

<b>Crop &amp; Disease</b>	<b>Dosage rate</b>	<b>Remarks</b>								
<b>Apples</b> Powdery mildew ( <i>Podosphaera leucotricha</i> )	6.25 ml / 100 l water	Apply <b>PENCONAZOLE 200 EW</b> as part of a spray programme as a full cover application to the point of run-off or in concentrated form (4x). Start spraying at the pink stage and apply at 10 to 14 day intervals as a preventative programme. Always ensure complete coverage.								
<b>Apples</b> Scab ( <i>Venturia inaequalis</i> )  <b>Pears</b> Scab ( <i>V. pirina</i> )	12.5 ml / 100 l water  <b>PLUS</b>  50 % to 75 % of the recommended dosage of a registered broad spectrum fungicide (* refer " <b>Remarks</b> " in next column)	Apply <b>PENCONAZOLE 200 EW</b> as part of a spray programme as a full cover application to the point of run-off or in concentrated form (4x). Start application at green tip stage. Repeat at weekly intervals as a preventative programme from pre-blossom stage until end of blossom stage. Apply every fortnight during post-blossom period. Always ensure complete coverage.  (* E.g. 60 g to 70 g <b>MANCOZEB 800 WP</b> or 100 g <b>CAPTAB WP</b> of 100 ml <b>CAPTAB SC</b> per 100 litres water).								
<b>Apples and Pears</b>										
<b>Application:</b>										
i) Ensure that the correct quantity of fungicide is applied per hectare. To obtain this, the product must be applied according to the Tree-Row-Volume (TRV) equation (see below).										
ii) Post-infection applications (Scab): The combinations of <b>PENCONAZOLE 200 EW</b> and broad-spectrum fungicides can be used curatively to complement a preventative contact fungicide spray programme. Curative treatments are recommended only, where sufficient and reliable disease prediction systems are available. Treatment should commence not later than 4 days after the start of the infection period.										
iii) <b>High volume:</b> The volume of water required per hectare must be calculated according to the Tree-Row-Volume (TRV) equation:										
<b>Litres per hectare = <math>\frac{\text{Tree height} \times \text{Tree diameter} \times 937}{\text{Row width}}</math></b>										
The TRV equation calculates the volume of water required when the trees are in full leaf cover. The water volume required per hectare can be used to calculate the quantity of <b>PENCONAZOLE 200 EW</b> required per hectare at the various growth stages of the trees during the season. Also refer to the table below.										
<b>Recommended water required per hectare during different growth stages of trees.</b>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><b>Stage of growth</b></th> <th style="text-align: center;"><b>% High Volume water required per ha</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Green tip to ± 30 % blossom</td> <td style="text-align: center;">60 %</td> </tr> <tr> <td style="text-align: center;">± Full blossom to ± middle November</td> <td style="text-align: center;">80 %</td> </tr> <tr> <td style="text-align: center;">From ± beginning December</td> <td style="text-align: center;">100 %</td> </tr> </tbody> </table>			<b>Stage of growth</b>	<b>% High Volume water required per ha</b>	Green tip to ± 30 % blossom	60 %	± Full blossom to ± middle November	80 %	From ± beginning December	100 %
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iv) <b>Low volume:</b> When applying <b>PENCONAZOLE 200 EW</b> as a low volume spray, ensure that the correct quantity of product (as calculated for a high volume requirement) will be applied per hectare.										
<b>Cucurbits</b> Powdery mildew ( <i>Sphaerotheca fuliginea</i> or <i>Erysiphe cichoracearum</i> )	22.5 ml / 100 l water  <b>OR</b>  112.5 ml / ha	Apply in a preventative spray programme. Apply as a full cover spray at the first signs of disease and repeat every 10 to 14 days. Apply in a minimum of 500 litres water per hectare. Apply immediately following an infection period or disease warning, <b>BEFORE the disease can gain momentum</b> . Alternate with a chemically non-related fungicide for lasting results.								

Crop & Disease	Dosage rate	Remarks
<p><b>Peas</b> Powdery mildew (<i>Erysiphe pisi</i>)</p>	<p>100 to 110 ml / ha</p>	<p>Apply in a preventative programme. Commence application when the disease is expected or when the first signs of the disease are observed in the area. Apply immediately following an infection period or disease warning, <b>BEFORE the disease can gain momentum</b>. Apply with 10 to 14 day intervals. Use the higher dosage in case of high disease pressure. <u>Ground application:</u> Full cover spray using at least 500 litres water per hectare. <u>Aerial application:</u> Apply in 30 litres water per hectare.</p>
<p><b>Table and wine grapes</b> Powdery mildew (<i>Oidium tuckeri</i>)</p>	<p>15 ml / 100l water (10 to 14 day intervals)</p> <p style="text-align: center;"><b>OR</b></p> <p>22.5 ml / 100 l water (18 to 21 day intervals)</p>	<p>Programme application. Apply as a full cover spray to the point of run-off. Start the application when the first shoots are 10 to 12.5 cm long and repeat at intervals as indicated. Ensure complete coverage at all times. <u>Wine grapes</u> - Increase the spray volume from 250 litres per hectare to 1000 litres per hectare at pea berry size, progressively. Repeat at this volume rate for the remainder of the season. <u>Table grapes</u> - Increase the volume progressively from 500 litres per hectare to 1200 litres per hectare. <b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Do not surpass the spray interval.</li> <li>• Use the higher dosage rate if the spray interval exceeds 14 days.</li> <li>• It is recommended to supplement the <b>PENCONAZOLE 200 EW</b> spray programme 2 to 3 times during the season with <b>SULPHUR</b> (800 g / kg).</li> </ul>