

DIFENOCONAZOLE 250 EC

Distributed by: Harvest Chemicals
 Registration Holder/Registrasiehouer Harvest Crop Solutions (Pty)Ltd.
 Reg.No. 2014/187205/07
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HARVEST
 CHEMICALS



An emulsion concentrate, systemic fungicide for the control of scab in apples and pears; navel-end rot and brown spot in citrus; powdery mildew in grapes; leaf spot in ground nuts; grey leaf spot and northern leaf blight in maize; and early blight in potatoes.

'n Emulsie-konsentraat sistemiese swamdoder vir die beheer van skurf in appels en pere; navel-end verrotting en bruinvlek in sitrus; poeieragtige meeldou in druive; blaarvlek in grondbone; grysblaarvlek en noordelike blaarskroei in mielies en vroeë roes in aartappels.

Batch No	Reg. No. L 10832, Act No 36 of 1947.	Reg Nr. L 10832, Wet Nr. 36 van 1947.	Lot Nr
<input type="text"/>	FUNGICIDE GROUP CODE 3	SWAMDODER GROEPKODE	<input type="text"/>
Date of manufacture	Active Ingredient: Difenoconazole (triazole)	250g/l	AktieweBestanddeel: Difenokonasool (triasool)
<input type="text"/>	Nett Volume	5l	Vervaardigingsdatum
		Netto Volume	<input type="text"/>



WARNINGS

• Withholding period - allow the following number of days between last application and harvest or feeding:

Apples and pears	14 days	Citrus	90 days
Grapes	28 days	Potatoes	14 days
Groundnuts (fodder)	21 days	Maize	14 days

- Handle with care.
- Keep out of reach of children, uninformed persons and animals.
- May cause serious damage to the eyes.
- Harmful if swallowed, inhaled, or absorbed through the skin.
- May irritate and cause sensitization of the skin.
- Should poisoning be suspected, consult a doctor and present this label to him/her.
- Toxic to fish and aquatic organisms.
- Prevent contamination of dams, rivers and any water body.
- **FLAMMABLE:** Keep away from heat and flame.
- Store in the original container under lock and key, tightly closed and away from sun and damp in a well ventilated cool area (20°C). Avoid storage temperatures below 10°C and above 35°C.
- Store away from food, feed and seed.
- **Re-entry:** Do not enter the treated field until the spray deposit has dried unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warning. Do not spray over or allow drift to contaminate water of adjacent areas.

Although this fungicide has been tested extensively under a wide range of conditions, the registration holder does not warrant that it will be efficacious under every possible condition because the action and effect thereof may be affected by factors such as abnormal soil, climate and storage conditions; quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the remedy concerned as well as by the method, timing and accuracy of the application. The registration holder furthermore 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:

- Wear protective clothing when handling the concentrate (face shield, rubber boots, gloves).
- Do not inhale fumes or spray mist.
- Avoid contact with skin and eyes.
- In case of accidental contact with eyes, rinse with clean water for at least 15 minutes.
- After use and in the case of accidental skin contact, wash thoroughly with soap and water.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing after use.
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent the drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Rinse empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the empty container by perforation and flattening and never use for any other purpose.
- Clean application equipment after use and dispose of waste water in safe and responsible manner.

RESISTANCE WARNING

HARVEST DIFENOCONAZOLE 250 EC is a group code 3 fungicide. Any fungus population may contain individuals naturally resistant to **HARVEST DIFENOCONAZOLE 250 EC** and other group code 3 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. **HARVEST DIFENOCONAZOLE 250 EC** or any other group code 3 fungicide may not control these resistant fungi.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code.
- Use alternative products or tank mix with products from different fungicide group codes – refer to the individual product labels.
- Integrate other control methods (chemical, cultural, biological) into disease control programmes.
- For applicable information on resistance management contact the registration holder of this product.

As an anti-resistance measure it is recommended to apply **HARVEST DIFENOCONAZOLE 250 EC** in a spray programme with other unrelated fungicides.

USE RESTRICTIONS

Drought, nutrient or other stress conditions can reduce the uptake and activity of systemic fungicides in crops. It is not recommended to apply **HARVEST DIFENOCONAZOLE 250 EC** during these stress periods. If in doubt, consult a representative of Harvest Crop Solutions (Pty) Ltd or a distributor of the product.

Spray programmes with **HARVEST DIFENOCONAZOLE 250 EC** should be preventative unless mentioned otherwise.

CROP-DISEASE RECOMMENDATIONS

HARVEST DIFENOCONAZOLE 250 EC is a local systemic fungicide with limited acro-petal movement. When applied in a protective spray programme **HARVEST DIFENOCONAZOLE 250 EC** effectively controls apple scab in **apples**; navel end-rot/black core rot (*Alternaria citri*) and brown spot (*Alternaria alternata*) in **citrus**; powdery mildew (*Oidium tuckeri*, = *Uncinula necator*) in **grapes**; early leaf spot (*Cercospora arachidicola*), late leaf spot (*Cercosporidium personatum*), web blotch (*Phoma arachidicola*) and rust (*Puccinia arachidis*) in **groundnuts**; grey leaf spot (*Cercospora zae-maydis*) and northern leaf blight (*Helminthosporium turcicum*) in **maize**; pear scab (*Venturia pirina*) in **pears**; early blight (*Alternaria solani*) in **potatoes**

DIRECTIONS FOR USE

Use only as directed.

Compatibility

HARVEST DIFENOCONAZOLE 250 EC compatibility with other products is influenced by the formulation of the products involved and the quality of the spray water. It is advised that a physical compatibility test always be carried out prior to application. **HARVEST DIFENOCONAZOLE 250 EC** is compatible with Mancozeb 420 EC and Mancozeb 800 WP, and other commonly used fungicides, insecticides and foliar feeds normally used on the various crops for which **HARVEST DIFENOCONAZOLE 250 EC** is registered.

Mixing instructions

- Shake the **HARVEST DIFENOCONAZOLE 250 EC** container thoroughly before pouring.
- Half fill the spraying tank with clean water, add the required amount of **HARVEST DIFENOCONAZOLE 250 EC** to the water, and fill the spray tank to the required volume with clean water.
- Replace cap after pouring **HARVEST DIFENOCONAZOLE 250 EC** into the tank.
- Stop spraying if the wind speed exceeds 15 km/h.
- 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:
 - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
 - 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.

COMPATIBILITY

HARVEST CHLORPYRIFOS 480 EC is compatible with light-narrow range mineral oil, dimethoate (400 g / ℓ EC) lapsed.

APPLICATION

Dosage rates indicated per 100 litres water are for high volume spraying.

- When a wettable powder is sprayed as a tank mix with **HARVEST DIFENOCONAZOLE 250 EC**, the wettable powder should be mixed first and well agitated after which the **HARVEST DIFENOCONAZOLE 250 EC** is added and the spray tank filled to its final volume.
- Ensure thorough agitation of the mixture in the spray tank during mixing and spraying.
- Mixtures must be sprayed out immediately and not allowed to stand in the spray tank.

Application techniques

Ground application

Apply in 300 – 500l water/ha.

HARVEST DIFENOCONAZOLE 250 EC may be applied with conventionally used high-volume spray equipment. Nozzles should be fitted with hollow cone tips to ensure medium to fine droplets. Ensure that the correct dosage rate per hectare is applied by calibrating spray equipment before application. Ensure that an even spray droplet distribution on the target area is achieved.

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Aerial application

HARVEST DIFENOCONAZOLE 250 EC may only be done as an aerial application by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that during application the spray mixture is distributed evenly over the target area and that the loss of spray material is restricted to a minimum. It is therefore essential that the following criteria be met:

- **Volume:** It is recommended that a spray mixture volume of 30l per hectare is used. 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 cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 280 to 300 microns is recommended. Fine droplets less than 150 microns (high drift and evaporation potential) to be limited to a minimum.
- Flying height: The height of the spray boom to be maintained at 3 to 4 metres above the target. When the aircraft dives, is in a climb or when banking, do not spray.
- Suitable **atomising equipment** is to be used 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.
- All the atomisers to be positioned within the inner 60 to 75 % of the wingspan to prevent droplets from entering the **wingtip vortices**.
- The difference in **temperature** should not exceed 8°C between the wet and dry bulb thermometers, of a whirling hygrometer.
- Stop spraying if the **wind** speed exceeds 15 km/h.
- Stop spraying under **turbulent**, unstable and dry conditions during the heat of the day.
- Spraying when temperature **inversion conditions** exist (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - 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.

REMARKS

Begin applications earlier if the disease starts to develop. During the pre-flowering stages and after the **HARVEST DIFENOCONAZOLE 250 EC** treatments are discontinued, apply a suitable broad spectrum fungicide. Ensure complete coverage of the entire plant with spray mixture at all times. **HARVEST DIFENOCONAZOLE 250 EC** does not control late blight (*Phytophthora infestans*).

APPLICATION RECOMMENDATIONS

CROP/DISEASE	DOSAGE	
<p>Apple and Pears Apple scab (<i>Venturia inaequalis</i>) Pear scab (<i>Venturia pirina</i>)</p>	<p>6.0ml + 75g Mancozeb 750 WG / 100l water</p>	<p>Spray at 7 day intervals from green-tip to the end of the flowering period. Spray at 10 to 14 day intervals from the end of flowering.</p>
<p>CITRUS Navel end-rot/black core rot (<i>Alternaria citri</i>) Brown spot (<i>Alternaria alternata</i>)</p>	<p>Navel, Clementine, Mandarin. 40.0 to 60.0ml/100l water Mandarin. 40.0 to 60.0ml + 200g Mancozeb 800 WP / 100l water</p>	<p>Apply when at 50% petal drop and repeat at 100% petal drop. The higher dosage rate to be used where orchards are known to have an <i>Alternaria</i> infection. Depending on tree size apply as a medium cover spray at ± 20l spray mix per tree. Within a season do not apply more than 3.0l Difenoconazole 250 EC per ha.</p>
<p>GRAPES Powdery mildew (<i>Oidium tuckeri</i>, <i>Uncinula necator</i>)</p>	<p>125ml/ha</p>	<p>Apply as a full cover spray to the point of run-off at intervals of 14 days. The first spray to be applied when shoots are 10 to 25cm long and the last spray before bunch closure (berry touch stage). Not more than 4 treatments to be applied per season. Table grapes: 500 to 1 200l/ha spray volume depending on growth stage. Wine grapes: 250 to 1 000l/ha spray volume depending on growth stage.</p>
<p>GROUNDNUTS Early leaf spot (<i>Cercospora arachidicola</i>) Late leaf spot (<i>Cercosporidium personatum</i>) Web blotch (<i>Phoma arachidicola</i>) Rust (<i>Puccinia arachidis</i>)</p>	<p>GROUND APPLICATION Dryland 300ml and 200ml/ha Apply 300ml/ha for the first application and repeat every 10-14 days using 200ml/ha OR 325ml/ha every 18-21 days. Irrigation 300ml/ha every 10-14 days OR 400ml/ha every 18-21 days. AERIAL APPLICATION 350ml/ha</p>	<p>Begin application at the first signs of disease. Continue all spray programmes until the plants start senescence naturally. Apply in a protective spray programme. Begin applications at the start of flowering (10-12 weeks after planting) or earlier, when the disease (s) starts to develop. Aerial applications are recommended as an emergency measure when conditions are unfavourable for good ground application. On dryland crops apply every 14-21 days and every 10-14 days on irrigated crops.</p>
<p>MAIZE & SWEET CORN Grey leaf spot (<i>Cercospora zae-maydis</i>) Northern leaf blight (<i>Helminthosporium turcicum</i>)</p>	<p>300ml/ha</p>	<p>Grey leaf spot: Begin spraying when disease is present on the lower leaves and before symptoms show on the three leaves immediately below the cob and before symptoms exceed 2% of leaf area. Follow up applications may be necessary 14 to 21 days later. Northern leaf blight: Begin spraying at first signs of disease and before 2% of leaf area is infected with the disease. Follow up sprays should be applied 14 to 21 days later.</p>
<p>POTATOES Early blight (<i>Alternaria solani</i>)</p>	<p>GROUND AND AERIAL APPLICATION 175ml/ha every 7 days OR 250ml/ha every 10 days OR 350ml/ha every 14 days</p>	<p>Apply in a protective programme. Begin applications immediately prior to flowering (or earlier when the disease starts to develop) and continue until the plants start to senesce (end of flower drop). Ensure complete coverage of the plant mass with the spray mixture. HARVEST DIFENOCONAZOLE 250 EC does not control late blight (<i>Phytophthora infestans</i>).</p>