Fungicide



PROPICONAZOLE 250 EC

Reg. No. L 7306 Act No. 36 of 1947

6: 10/6/2022 - Jan2023

An emulsifiable concentrate fungicide for the control of diseases on crops as mentioned below.

ACTIVE INGREDIENT

propiconazole (triazole)

250 g/e

GROUP

3

FUNGICIDE



DANGER

UN Number: 3082

Hazard Statements:

Harmful if swallowed.

May be fatal if swallowed and enters airways.

May be harmful in contact with skin.

Causes mild skin irritation

May cause an allergic skin reaction.

Causes serious eve damage.

May damage fertility or the unborn child. Very toxic to aquatic life with long lasting effects

Precautionary Statements:

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

Avoid release into the environment.



Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620

Tel. (011) 396 2233 Website: www.villacrop.co.za

24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

PROPICONAZOLE 250 EC

Reg. No. L 7306 Act No. 36 of 1947 FRAC FUNGICIDE GROUP CODE: 3

ACTIVE INGREDIENT:

propiconazole (triazole)250 g/ℓ

Registration holder:

UNIVERSAL CROP PROTECTION (PTY) LTD.

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P.O. Box 801, KEMPTON PARK, 1620, Tel. (011) 396 2233

WARNINGS

Withholding periods:

Allow the following number of days between last application and harvest or grazing of the crops listed below:	
Peaches	10 days
Barley & Wheat	40 days
Pecan nuts	90 days

Hazard statements:

Harmful if swallowed.
May be fatal if swallowed and enters airways.
May be harmful in contact with skin.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May damage fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Toxic to wildlife.
- Store in a cool, dry, well-ventilated place, away from food and feed stuffs, in the original container, tightly
 closed and secured.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- In case of poisoning call a doctor and make this label available to him/her.

Aerial application:

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

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 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

Precautionary statements:

Obtain, read and follow all safety instructions before use.

Wash hands thoroughly after handling. Do not touch eyes.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

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IF SWALLOWED, ON SKIN, IN EYES or if skin irritation or rash occurs: Get medical help.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower].
IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy
to do. Continue rinsing.
IF exposed or concerned, get medical advice.
Rinse mouth.
Collect spillage.
Store in a well-ventilated place. Keep cool.
Store locked up.

- Do not spray or allow spray drift onto other crops, grazing, rivers, dams and areas not under treatment or to nearby water sources. Avoid release to the environment.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or
 mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse
 the empty container three times in succession with one quarter of the container and dispose of via an
 approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any
 other parties that may use it as a container for food or beverage.
- Destroy the container by perforation and flattening and dispose of it in a safe way.

Dispose of content/container to suitable landfill in accordance with local regulations.

- **Do not** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components		
Propiconazole	250 g/ℓ	
Dodecylbenzene sulphonate	< 50 g/ℓ	
Ethoxylated fatty alcohols	< 100 g/ℓ	
Solvent	< 700 g/ℓ	

SYMPTOMS OF HUMAN POISONING

Prolonged or repeated exposure may irritate the respiratory tract and eyes and may cause headaches and dizziness. Some individuals may develop an allergic response.

FIRST AID TREATMENT

- <u>Inhalation</u>: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. Seek medical attention if you feel unwell after inhalation.
- <u>Skin contact</u>: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation occurs.**
- Eye contact: Flush eyes with clean water for at least 15 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**
- <u>Ingestion</u>: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting due to the solvent. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

NOTE TO PHYSICIAN

There is no specific antidote available. Treat symptomatically.

RESISTANCE WARNING

PROPICONAZOLE 250 EC is a group code 3 fungicide. Any fungus population may contain individuals naturally resistant to **PROPICONAZOLE 250 EC** and other group code 3 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **PROPICONAZOLE 250 EC** 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 codes 7, 27, 28, 29, 30 or M, refer to

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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.

NOTE

PROPICONAZOLE 250 EC is a demethylation inhibiting (DMI) fungicide recommended for the control of various important plant diseases. Repeated exclusive use of **PROPICONAZOLE 250 EC** may lead to a build-up of resistant strains of fungi resulting in a loss of disease control. If treatment is not effective following the use of **PROPICONAZOLE 250 EC** as recommended, resistant strains may be present. If a DMI-resistant strain is positively identified, consideration should be given to prompt use of non-DMI fungicides. A spray programme of mixtures or alternating with non-DMI fungicides may delay resistant strain build-up.

Mode of action:

Propiconazole belongs to the triazole chemical group (DMI's) of fungicides (FRAC group code 3) and the mode of action is described as "inhibiting of sterol demethylation" thereby affecting ergosterol biosynthesis. These actives are systemic providing preventative, systemic and eradicative control, with translocation taking place acropetally in the xylem.

USE RESTRICTIONS

It is recommended not to apply systemic products, such as **PROPICONAZOLE 250 EC**, when crops are under severe drought and/or fertility stress conditions. The uptake and activity of systemic compounds may be reduced under these conditions. Consult a representative or the distributor in the event of any uncertainty.

GENERAL PROPERTIES

- **PROPICONAZOLE 250 EC** is a systemic foliar fungicide, translocated acropetally in the xylem, with preventative and curative action.
- Applied in a preventative spray programme, the product effectively controls a broad spectrum of fungal diseases on various crops. For detailed recommendations refer to the "APPLICATION RATES" below.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- PROPICONAZOLE 250 EC is compatible with ACANTO[®] 250 SC (L 8233) and with most commonly
 used fungicides, insecticides and foliar feeds normally used with the various crops.
- The compatibility of **PROPICONAZOLE 250 EC** with other products may be influenced by the formulation of other products, as well as the quality of dilution water. As changing factors may vary, a physical compatibility test must always be performed prior to application of such a tank mixture.
- When PROPICONAZOLE 250 EC is used in combination with any other agricultural remedy, all WARNINGS, PRECAUTIONS, USE RESTRICTIONS and DIRECTIONS FOR USE mentioned on that label, must be adhered to.

Mixing instructions:

- Half fill the spray tank with clean water.
- Shake the **PROPICONAZOLE 250 EC** container well before use.
- Add the required amount of PROPICONAZOLE 250 EC to the water in the spray tank while stirring.
- Replace the cap after use.
- If any other product is to be mixed with **PROPICONAZOLE 250 EC**, the required volume of this product must be pre-mixed in a mixing tank with 10 litres water. When a wettable powder is to be added, cream in advance
- Agitate the water in the spray tank and then add the product(s) to the tank in the following sequence (as applicable): acidifier/buffer or adjuvant, suspension concentrate, water-soluble concentrate, emulsifiable concentrate.
- Fill the spray tank with water to the required level while maintaining agitation, to ensure thorough mixing.
- Maintain agitation while spraying.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

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INSTRUCTIONS FOR APPLICATION

Ground application:

PROPICONAZOLE 250 EC can be applied with conventional high-volume spray equipment. Calibrate the apparatus before application, to ensure that the correct dosage is applied. The distribution of the spray solution must be uniform throughout the target area.

Aerial application (Wheat and Barley only):

Aerial application of **PROPICONAZOLE 250 EC** 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:

- <u>Volume</u>: 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 cm² must be recovered at the target area.
- <u>Droplet size</u>: 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.
- <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable <u>atomising equipment</u> 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 <u>temperature</u> between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the <u>wind speed</u> exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or <u>high humidity conditions</u> (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.

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APPLICATION RATES

Crop and Disease	Dosage rate	Remarks
Apricots, Peaches & Plums Blossom blight (Monilinia laxa)	20 mℓ / 100 ℓ water	Apply the first application when 5 % of blossoms have reached the full balloon stage. Apply follow-up sprays until after blossoming at weekly intervals.
Black wattle (plantations) (Acacia mearnsii) Rust (Uromucladium spp.)	Ground application 25 m/ /100 \ell water PLUS light mineral oil (250 m/ / 100 \ell water) OR Aerial application 750 m/ / ha PLUS 100 m/ / 100 \ell water Direct	PROPICONAZOLE 250 EC IS RECOMMENDED IN AN INTEGRATED DISEASE MANAGEMENT PROGRAMME. IN ORDER TO ACHIEVE CONSISTENT AND RELIABLE DISEASE CONTROL, PREVENTIVE FUNGICIDE APPLICATIONS ARE CRITICALLY IMPORTANT. Follow the following program application: Apply Indicate 250 SC as the first application at the onset of the raining season when active growth of the trees is expected. A second application of Indicate 250 SC is recommended four (4) weeks later. Under continued high disease pressure conditions, further applications with PROPICONAZOLE 250 EC is recommended at 4 weekly intervals throughout the raining season and active growth of the trees. Ground application: Apply in at least 2000 to 3000 litres water per hectare depending on tree size and density. Ensure thorough coverage of the tree frames, twigs and leaves. Aerial application: Apply in at least 40 litres water per hectare. Consult the Indicate 250 SC labels for USE RESTRICTIONS, WARNINGS (including RESISTANCE WARNINGS), PRECAUTIONS and DIRECTIONS FOR USE.
Mangoes Powdery mildew (Oidium mangiferae)	20 mℓ / 100 ℓ water	Apply the first application when the first signs of the disease are noticed, usually at 50 % flowering. Apply follow-up sprays until 100 % petal drop at 10-to 14-day intervals.

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Crop and Disease	Dosage rate	Remarks
Oak trees Powdery mildew (Oidium quercinum)	20 mℓ / 100 ℓ water	Old established trees: Apply only one (1) application at full leaf set when the leaves are fully developed (approximately middle September). Apply as a high-volume application. Young actively growing trees: Apply two (2) applications. Apply the first application at full leaf set when the leaves are fully developed (approximately middle September). Apply the second follow-up application 8 weeks later. Apply as high volume applications.
Peaches Powdery mildew (Sphaerotheca pannosa)	20 mℓ / 100 ℓ water	IMPORTANT Not for use on export fruit. Apply PROPICONAZOLE 250 EC in a spray programme, commencing when disease is expected or when the first signs of the disease are noticed. Apply follow-up applications for as long as the conditions favour development of the disease at 14-day intervals. Apply in sufficient volume of water, to ensure thorough and complete coverage.
Pecan nuts Scab (Fusicladium effusum)	50 mℓ / 100 ℓ water	Apply five (5) applications. Apply the first application when the leaves unfold and the second application 10 days later. The third application to be applied 21 days after the second and the fourth application 28 days later. Depending on the conditions, the fifth application may be necessary 28 days after the fourth application. Apply 1000 to 2000 litres spray mixture per hectare. NOTE Apply a suitable contact fungicide alone or as a tank mixture with PROPICONAZOLE 250 EC with the last two to three applications, to enhance the control of Fruit scab.

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Crop and Disease	Dosage rate	Remarks
Wheat & Barley	NOTE Various factors influence the efficacy of PROPICONAZOLE 250 EC. Time of application with respect to crop stage and incidence of diseases, coverage and penetration of the spray material within the plant mass, type of disease and the susceptibility of the crop cultivar are determining factors to consider. To ensure optimum results when applying PROPICONAZOLE 250 EC, use good agricultural practices and cultivars with resistance to the most important diseases. For the optimum time of applications for specific diseases, refer to application recommendations indicated below.	
Wheat Eyespot (Pseudo-cercosporella herpotrichoides)	Ground Application: 500 mℓ / ha Aerial Application: 500 to 600 mℓ / ha	Optimum time for application is between the growth stages GS 9 and 14*; that is during the elongation stages up to the formation of the second node stage. Do not apply any sprays for Eyespot control, after GS 14*.
Speckled leaf blotch (Septoria tritici), Glume blotch (Septoria nodorum) & Powdery mildew (Erysiphe graminis)	Ground Application: 500 mℓ / ha Aerial Application: 500 to 600 mℓ / ha	Development of foliar diseases between the flag leaf and ear emergence stages will have the greatest impact on yield. Therefore, the optimum time for application is between the growth stages GS 16 to 20* to protect the crop. Use the third leaf as indicator. Apply before more than 5 % of the surface of this third leaf is attacked.
Leaf rust (Puccinia recondita) & Yellow/stripe rust (Puccinia striiformis)	Ground Application: 500 mℓ / ha Aerial Application: 500 to 600 mℓ / ha	Apply when the first signs of the disease are noticed. In the case of Yellow/Stripe rust, apply a second application at the recommended dosage rate, three (3) weeks later, if conditions are favourable for disease development.
Karnal bunt (<i>Tilletia indica syn.</i> <i>Neovossia indica</i>)	Ground Application: 500 mℓ / ha Aerial Application: 600 mℓ / 45 ℓ water / ha	Apply the first application at 25 % ear appearance. Apply a follow-up application ten (10) days later. Ensure thorough coverage of all the plant parts. Reduce the risk of infection by combining the fungicide treatment with other disease management practices. This fungicide treatment may be adversely influenced by uneven ear emergence and/or flowering.
Barley Leaf spot (Rhynchosporium secalis), Leaf blotch (Net blotch) (Pyrenophora teres), Leaf rust (Puccinia hordei) & Powdery mildew (Erysiphe graminis)	Ground and Aerial Application: 500 mℓ / ha	Optimum time of application for Leaf spot is between the seventh leaf stage and flag leaf stage (GS 12 to 18*). If the disease develops earlier, earlier applications may be necessary. Other diseases are generally well controlled by applications performed for the control of Leaf spot. Irrespective of the disease, treatment should be applied before the disease gain momentum. Two applications are justified when Leaf blotch develops after the first application or when Leaf spot disease pressure is high. Apply the second application 18 to 21 days after the first application. NOTE For the second application the recommended dosage rate is 400 m/ per hectare for ground and aerial application.

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Crop and Disease	Dosage rate	Remarks
Barley Net (Leaf) Blotch (Pyrenophora teres) Leaf Spot (Scald) (Rhynchosporium secalis) Rust (Puccinia hordei) Powdery Mildew (Erysiphe graminis) Wheat Leaf Rust (Brown rust) (Puccinia recondita) Speckled Leaf Blotch (Septoria tritici) Glume Blotch (Septoria nodorum) Powdery Mildew (Erysiphe graminis) Yellow Rust (Stripe Rust) (Puccinia striiformis)	500 m/ ha PROPICONAZOLE 250 EC PLUS 300 m/ ha Acanto® 250 SC	Ground application: Apply in at least 300 litres water per hectare. Apply preventively or as soon as first disease symptoms are noticed. A follow-up application may be required three (3) weeks after the initial application. IMPORTANT Refer to the Acanto® 250 SC label for specific instructions and use restrictions.

^{* =} Growth stage (GS) according to the Department of Agronomy and Pastures, Faculty of Agricultural Science, University of Stellenbosch.

The following products mentioned in this label can be replaced with the following equivalent products:

- DIRECT (L 8680) = LINK (L 8675) and
- INDICATE 250 SC (L 9310 / N-AR 1482 / W 130688) = IMPROVE 250 SC (L 9311) = ESTRICON 250 SC (L 9433) (Azoxystrobin + Epoxiconazole).

ACANTO® 250 SC is a registered product of DUPONT DE NEMOURS SOUTH AFRICA (PTY) LTD.

LINK and INDICATE 250 SC are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

IMPROVE 250 SC and DIRECT are registered products of VILLA CROP PROTECTION (PTY) LTD.

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