

Read the label before opening the container.

For full particulars, see enclosed leaflet.

KEEP OUT OF REACH OF CHILDREN AND ANIMALS

DIFENCE

South Africa Reg. No: L7922 Act No. 36 of 1947

FRAC FUNGICIDE GROUP CODE: 3

An emulsified concentrate systemic fungicide for the control of diseases on crops as indicated.

ACTIVE INGREDIENT:

Difenoconazole (triazole).....250g/ℓ

Product Information: 072 678 8226
In case of poisoning: 082 446 8946

HAZARD STATEMENTS

- Flammable liquid and vapour
- May be fatal if swallowed and enters airways
- Causes skin irritation
- Causes serious eye damage
- May cause respiratory irritation
- May cause drowsiness or dizziness
- May cause damage to organs through prolonged or repeated exposure
- Very toxic to aquatic life with long lasting effects



PRECAUTIONARY STATEMENTS

- Do not eat, drink, or smoke when using this product.
- Dispose of content/container to suitable landfill in accordance with local regulations.

enviro
bio-chem

Registration holder: Erintrade CC t/a RT Chemicals

Co. Reg. No: CK2001/036403/23

44 Kerk Street, Lichtenburg NW, South-Africa

Tel: +27 87 231 7261 | Fax: +27 86 541 7948

Web: www.envirobiochem.co.za

Expiry Date:

Batch No:

Date of Manufacture:

UN No. 1993

WARNINGS:

- Allow the following number of days between last application and harvest or feeding:

Groundnuts (fodder):	21 days
Maize:	14 days (Do not graze or use treated maize as fodder.)
Potatoes:	14 days
- Flammable liquid and vapour
- May be fatal if swallowed and enters airways
- Causes skin irritation
- Causes serious eye damage
- May cause respiratory irritation
- May cause drowsiness or dizziness
- May cause damage to organs through prolonged or repeated exposure
- Very toxic to aquatic life with long lasting effects
- Keep out of reach of children, uninformed persons and animals.
- Store in the original container under lock and key, tightly closed and away from sun and damp in a well ventilated cool area. Avoid storage temperatures below 10°C and above 35°C.
- Store away from food and feed.
- Toxic to fish.
- Prevent contamination of dams, rivers and any water body.
- **FLAMMABLE:** Keep away from heat and flame.
- **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 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 effected 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 pest against the remedy concerned as well as by the method, time 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:

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Keep container tightly closed
- Avoid breathing mist, vapours and spray.
- Wash hands, forearms, and face thoroughly after handling
- Do not eat, drink, or smoke when using this product.
- Use only outdoors in a well-ventilated area.
- Avoid release to the environment.
- Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
- In case of accidental contact with eyes, wash with clean water for at least 15 minutes.
- After use and in case of accidental skin contact, wash thoroughly with soap and water.
- Take off contaminated clothing and wash it before reuse.
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Triple rinse empty container in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at

least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the 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 content of the spray tank. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

RELEVANT SUBSTANCES:

Difenoconazole 26%

Cyclohexanone <10%

Calcium dodecylbenzene sulfonate <5%

Xylene <70%

FIRST AID TREATMENT:

INGESTION: Immediately call a POISON CENTER or doctor/physician.

SKIN CONTACT: (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

INHALATION: Remove person to fresh air and keep comfortable for breathing.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

RESISTANCE WARNING:

For resistance management **DIFENCE** is a group code 3 fungicide. Any fungus population may contain individuals naturally resistant to **DIFENCE** and other group code 3 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. **DIFENCE** 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.
- Alternate or tank mix with products from different fungicide group codes.
- 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:

The uptake and activity of systemic compounds may be reduced when crops are under any form of stress such as drought or nutrient stress conditions. It is therefore not advisable to apply **DIFENCE** during such periods. If in doubt, consult a representative of Enviro Bio-Chem. Spray programmes with **DIFENCE** should be preventative unless mentioned otherwise.

General Properties:

DIFENCE is a local systemic fungicide with limited acropetal movement. When applied in a protective spray programme **DIFENCE** effectively controls early leaf spot (*Cercospora arachidicola*), late leaf spot (*Cercosporidium personatum*), web blotch (*Phoma arachidicola*) and rust (*Puccinia arachidis*) in groundnuts; early blight (*Alternaria solani*) in potatoes; and grey leaf spot (*Cercospora zea-maydis*) and northern leaf blight (*Helminthosporium turcicum*) in maize.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

The compatibility of **DIFENCE** with other products may be influenced by the formulation of the products involved as well as the quality of the water. A physical compatibility test should always be carried out prior to application. **DIFENCE** is compatible with commonly used fungicides, insecticides and foliar feeds normally used on the various crops for which **DIFENCE** is registered. In potatoes, **DIFENCE** can be tank mixed with **ABAMEC PLUS** (Reg. No: L5888), captab, chlorothalonil, mancozeb, cyromazine, **SELEFOS** (Reg. No: L6950) and **CONTROLLER** (Reg. No: L6783).

Mixing Instructions:

Replace cap after pouring.

Add the required amount of **DIFENCE** to the water in the spray tank. Stir constantly while mixing. When a wettable powder is sprayed as a tank mix with **DIFENCE**, the wettable powder should be mixed first and well agitated after which the **DIFENCE** 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 to 500ℓ water per hectare.

DIFENCE may be applied using conventional high volume spray equipment. Nozzles should be fitted with hollow cone tips giving medium to fine droplets. Calibrate apparatus before application to ensure that the correct dosage rate per hectare is applied. The distribution of the spray mixture should be uniform throughout the target area.

Aerial Application:

Aerial application of DIFENCE may only be done 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 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 30ℓ/ha 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 aerielly 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. Limit the production of fine droplets less than 150 microns (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 dives, is in a climb or when banking
- Use suitable atomising 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 15km/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.

APPLICATION RATES:

DISEASE/CROP	DOSAGE	REMARKS
MAIZE & SWEETCORN Grey Leaf Spot (<i>Cercospora Zeae-maydis</i>) & Northern Leaf Blight (<i>Helminthosporium Turcicum</i>)	<u>Aerial Application:</u> 300mℓ/ha	<u>Grey leaf spot:</u> Commence 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. Repeat applications may be necessary 14 to 21 days later. <u>Northern leaf blight:</u> Commence spraying at first sign of disease and before 2% of leaf area is infected with the disease. Repeat sprays should be made 14 to 21 days later.

DISEASE/CROP	DOSAGE	REMARKS
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>	<u>Ground Application - Dryland:</u> 300ml & 200ml/ha Apply 300ml/ha for the first application, and repeat every 10 to 14 days using 200ml/ha OR 325ml/ha every 18 to 21 days	Commence application at the first signs of disease. All spray programmes should continue until the plants start senescence naturally. Add 0.15 % BOOSTER OIL ; 150ml/100ℓ water (Reg. No: L6148) to the DIFENCE spray mix.
	<u>Irrigation:</u> 300ml/ha every 10 to 14 days OR 400ml/ha every 18 to 21 days.	Apply in a protective spray programme. Commence applications at the start of flowering (10 to 12 weeks after planting) or earlier, if the disease(s) starts to develop.
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>	<u>Aerial Application:</u> 350mℓ/ha	<u>Aerial application</u> are recommended as an emergency measure when conditions are unfavourable for good application. Apply every 14 to 21 days on dryland crops and every 10 to 14 days on irrigated crops.
POTATOES Early Blight <i>(Alternaria Solani)</i>	<u>Ground & Aerial Application:</u> 175mℓ/ha every 7 days OR 250mℓ/ha every 10 days OR 350mℓ/ha every 14 days	Add 0.15 % BOOSTER OIL ; 150ml/100ℓ water (Reg. No: L6148) to the DIFENCE spray mix. Apply in a protective programme. Commence applications immediately before flowering (or earlier if the disease starts to develop) and continue until the plants start to senesce (end of flower drop).
<p>REMARKS: Alternate every 7 days between DIFENCE and a suitable broad spectrum fungicide (e.g. mancozeb, chlorothalonil or copper). Commence applications during the flowering stages (about 8 weeks after transplant) or earlier if the disease starts to develop. Continue with DIFENCE into the picking stages (16 to 20 weeks after transplanting) applying a maximum of 8 DIFENCE applications per season. During the pre-flowering stages and after the DIFENCE treatments are discontinued, apply a suitable broad spectrum fungicide.</p> <p>Ensure complete coverage of the entire plant mass with spray mixture at all times. DIFENCE does not control late blight (<i>Phytophthora infestans</i>).</p>		

The following registrations under Act No. 36 of 1947 are acknowledged:

Abamec Plus: contains abamectin; Reg. No: L5888, RT Chemicals CC.

Booster Oil: spreader and sticker; Reg. No: L6148, RT Chemicals CC.

Controller: contains cymoxanil and mancozeb; Reg. No: L6783, RT Chemicals CC.

Selefos: contains profenophos; Reg. No: L6950, RT Chemicals CC.