

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Company Name: FarmAg International (Pty) Ltd
Mount Edgecombe,
4300, South Africa.

Address: P. O. Box 1523 61 Marshall Drive,
Durban Old Mill Industrial Park
4000 Mount Edgecombe

Phone No: [031] 003 3486

Product Name: PALETTE® 200 EW

Product Use: Fungicide

Effective Date: January 2018

Revision Date: March 2021

In case of Poisoning:

Griffon Poison Information Centre : 082 446 8946

Western Cape Poison telephone service: 0861 555 777

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Penconazole

Chemical Name: 1-(2,4-dichloro-β-propylphenethyl)-1H-1,2,4-triazole (IUPAC)

CAS No.: 66246-88-6

Chemical family: Triazole

Chemical formula: C₁₃H₁₅Cl₂N₃

Molecular weight: 284.2

Use: An emulsion in water systemic fungicide with protective and curative action for the control of certain diseases on certain crops.

Formulation: Penconazole 200 g/l
Emulsion, oil in Water

Hazardous ingredients:

Composition: content:

Penconazole ±20%

Other inerts ±15%

Symbol: Xi, Xn, N

Indication of danger: Irritant and harmful and environmental hazardous substance.

Risk Phrases: R20, R36/37/38, R51/53

SECTION 3 - HAZARD IDENTIFICATION**Toxicity class:**

WHO: III, Slightly hazardous.

Likely routes of exposure:

Eye contact, skin contact, ingestion, and inhalation.

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- Ingestion:** Harmful if ingested. If large amounts are swallowed and aspiration occurs, chemical pneumonitis may develop. Small amounts of product aspirated into the respiratory system during ingestion or vomiting, due to the solvent in product, may cause mild to severe pulmonary injury.
- Eye contact:** May be mildly irritating to eyes. However, it is unlikely to cause any more than mild transient discomfort. It is also unlikely to cause any lasting effects.
- Skin contact:** May irritate skin. The dermal toxicity of this product is low. However, skin contact should be avoided. This product is not a skin sensitizer.
- Inhalation:** May be a slight respiratory irritant.
- Environmental:** Toxic to aquatic organisms.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS**Inhalation:**

Immediately remove source of contamination or move victim to fresh air. If breathing has stopped, perform artificial respiration and administer oxygen. Do not give mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Keep person warm and at rest. Treat symptomatically and supportively as and when required. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Notes to physicians: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient.

Skin contact:

Remove contaminated clothing, shoes and leather goods immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with non-abrasive soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15 to 20 minutes). Seek medical advice if irritation develops and persists.

Eye contact:

Immediately flush the eyes with gently flowing lukewarm water or sodium bicarbonate solution for 20 to 30 minutes, occasionally lifting the upper and lower lids. If irritation persists, seek medical advice immediately.

Ingestion:

Do not induce vomiting. Never induce vomiting or give anything to drink to an unconscious person. If the person is alert, rinse mouth thoroughly with water and give one or two glasses of water to drink. Treat symptomatically and supportively. Call a physician or Poison Control Center.

Advice on treatment:

There is no specific antidote available. Treat symptomatically. The product contains solvent that may cause chemical pneumonitis if aspirated into lungs. Watch for delayed onset of pulmonary. If ingested perform gastric lavage and administer activated charcoal.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash point: Not Flammable

Extinguishing agents:

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Contain water used for fire-fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Fire fighting:

Remove spectators from surrounding area. Remove container from fire area if possible without risk. Eliminate all ignition sources in immediate area. Fight fire from maximum distance. For massive fire, use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours. Keep upwind.

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Personal protective equipment:

Fire-fighters and others that may be exposed should wear full protective impervious clothing, including gloves and eye protection, and self-contained breathing apparatus. Contact with the fumes and vapours should be avoided by staying upwind.

Clean all clothing before re-use. Severely contaminated clothing cannot be adequately decontaminated, and must be disposed as a hazardous waste. Shower with soap and water after contact with this product.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:

Avoid contact with skin and eyes. Do not inhale spray or fumes. For personal protection see Section 8.

Environmental precautions:

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Occupational spill:

For small liquid spills, soak up with lime, damp earth or sand, or other non-combustible absorbent material and place into containers for later disposal. For large liquid spills, contain the liquid for later disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep spectators away.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling:

Harmful if swallowed. Irritant to eyes and skin. Avoid contact with eyes and skin, and inhalation of dust, spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing.

Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Keep out of reach of unauthorized persons, children and animals. Store in its original labelled container in shaded, well-ventilated area. Store in dry area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:

Respirator:

Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in dusty or confined conditions or spillage and fire conditions a respirator suitable for protection from dusts and mists of pesticides is adequate.

Clothing:

Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

Gloves:

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Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

Eye protection:

The use of safety goggles (full-face shield) is recommended.

Emergency eye wash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White homogeneous solution, without coagulation and with a weak chemical odour.
Flammability:	None flammable
Flash point:	>100 °C
Explosion properties:	Not explosive.
Corrosiveness:	Non-corrosive.
Solubility:	Forms an emulsion in water.
pH:	6.4 in 1% aqueous solution.
Density:	1.03g/ml (20°C).

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable for 2 years under normal conditions of use.
Incompatible with alkaline materials. Oxides of carbon and nitrogen may be given off when exposed to extreme heat or fire.

Conditions to avoid: Fire and heat

Incompatibility: Strong acids, and alkaline pesticides.

Hazardous Polymerization: Not known.

Hazardous Decomposition Products: Can decompose at high temperatures and form toxic gases.

SECTION 11 -**Formulation and Active ingredient:**

Acute oral LD50:	Oral: > 2125 mg/kg (a.i.), >10315 mg/kg (calc.)
Acute dermal LD50:	Dermal: > 3000 mg/kg (a.i.), >14563 mg/kg (calc.)
Acute inhalation LC50:	>4.046 mg/m ³ (a.i)
Eye irritation:	Mild-irritant.
Skin irritation:	Mild-irritant.
Skin sensitization:	Non sensitization in guinea pigs.
Penconazole tech.: ADI:	0.03 mg/kg b.w. [1992]

SECTION 12 - ECOLOGICAL INFORMATION**Mobility, Degradability & Accumulation:**

DT₅₀ in soil is 133 to 343 days, depending on the soil type. DT₅₀ for photolysis is 4 days in natural sunlight. In plants, the metabolic pathways are hydroxylation of the propyl side chain, conjugation to glucosides or metabolism to triazolalanine and triazolylacetic acid. **Animals:** After oral administration, **Penconazole** is rapidly eliminated

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practically to entirety with urine and faeces. Residues in tissues were not significant and there was no evidence for accumulation.

ECOTOXICOLOGY (technical material):**Birds:** Oral LD₅₀: Mallard ducks and Bobwhite quail > 2000 mg/kg.**Dietary (5 d):** Mallard ducks and Bobwhite quail > 5620 mg/kg diet.**Fish:** LC₅₀ (96 hours): Rainbow trout 1.3 carp 3.8 mg/l**Daphnia magna:** LC₅₀: 48 hours: 6.7mg/l**Algae:** LC₅₀ for (3 d) for *Pseudokirchneriella subcapitata* E_bC₅₀ 1.7mg/l**Bees:** Not toxic to bees: LD₅₀ (Oral & topical) > 200 µg/bee, (200EW)**Earthworms:** LC₅₀ mg/kg >1000 mg/kg dry soil.**SECTION 13 - DISPOSAL CONSIDERATION****Pesticide and container disposal:**

Open dumping or burning of this pesticide is prohibited. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

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 third of the volume of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Do not re-use the empty container for any other purposes but destroy it by perforation, flattening and bury in an approved dumpsite. Prevent contamination of food, feedstuffs, drinking water and eating utensils. Comply with local legislation applying to waste disposal.

SECTION 14 - TRANSPORT INFORMATION**UN NUMBER:** 3082**Road Transport ADR/IRD:**

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, Liquid, N.O.S.

Penconazole 200 g/l

Emulsion, oil in Water

Air Transport ICAO/IATA:

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, Liquid, N.O.S.

Penconazole 200 g/l

Emulsion, oil in Water

Maritime Transport IMDG/IMO:

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, Liquid, N.O.S.

Penconazole 200 g/l

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Emulsion, oil in Water

SECTION 15 - REGULATORY INFORMATION

Symbol: X_i, X_n, N

Indication of danger: Irritating, harmful and toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Risk phrase(s):

R 20/22 Harmful by inhalation and if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in aquatic environment

Safety phrases:

S 1/2 Keep out of reach children.

S 13 Keep away from food, drink and animal feeding stuffs.

S 22 Do not breathe dust.

S 24/25 Avoid contact with skin and eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

SECTION 16 - OTHER INFORMATION

Packaging:

Packed in 1L; 5L; 10L; 20L; 25L Fluorinated HDPE Plastic containers / bottles / drums and labeled according to South African regulations and guidelines.

Disclaimer:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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