

**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

**1. PRODUCT & COMPANY IDENTIFICATION**

**Trade name:** FarmAg Difenconazole  
**Molecular formula:** C<sub>19</sub>H<sub>17</sub>C<sub>12</sub>N<sub>3</sub>O<sub>3</sub>  
**Molecular Weight:** 406.3  
**Chemical Name:** 1H-1, 2, 4-triazole, 1-[[2-[2-chloro-4-(chlorophenoxy) phenyl]-4-methyl-1, 2-dioxolan-2-yl] methyl]  
**CAS No:** 119446-68-3  
**UN NO:** 3082  
**Creation Date:** October 2015  
**Revision Date:** August 2017

**24 Hr Emergency Number:** 082 771 2712**In case of poisoning:**

Poison Information Centre: 082 446 8946  
 Tygerberg Hospital: (021) 931 6129  
 Poison Emergency Enquiries (021) 689 5227

**In case of Spillage:**

HAZMAT: 0800 147 112

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

| Composition       | CAS No.     | Content % |
|-------------------|-------------|-----------|
| Difenconazole     | 119446-68-3 | 92.0      |
| Other ingredients | -----       | 8.0       |

**3. HAZARD IDENTIFICATION**

**Symptoms of Acute Exposure:** May cause eye irritation. **Hazardous Decomposition Products:** Can decompose at high temperatures forming toxic gases.

**Unusual fire, Explosion and Reactivity Hazards:** During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

**4. FIRST AID MEASURES AND PRECAUTIONS**

**General:** Remove the affected person from the danger zone to a well-ventilated room or to fresh air, and protect from under cooling. In case of suspected poisoning: Immediately call a physician.

**Eye contact:** Rinse eyes with clean water for several minutes and immediately call a physician.

**Ingestion:** Repeatedly administer medicinal charcoal in a large quantity of water. Note: Never give anything by mouth to an unconscious person. Do not induce vomiting.

**Skin contact:** Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water, including hair and under fingernails.

**Medicinal instructions:**

Antidote: No specific antidote is known! Apply symptomatic therapy.

Experiences Specific to Man: No case of human poisoning is on record.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing Media:** Dry chemical extinguisher, foam, carbon dioxide or water spray (do not use direct jet of water)

**Special Hazards during Fire Fighting:** Combustion products are toxic and/or irritant.

Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.

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**Protective Equipment for Fire Fighting:** Use self contained breathing apparatus. Wear protective equipment.**6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)**

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewerage and drainage systems or any body of water. Clean up spill immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

**7. HANDLING AND STORAGE REQUIREMENTS**

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverage or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is potential for exposure to the material. Wash thoroughly with soap and water after handling.

**8. EXPOSURE CONTROL/PERSONAL PROTECTION**

**Ingestion:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is potential for exposure to the material. Wash thoroughly with soap and water after handling.

**Eye contact :** Where eye contact is likely, use chemical splash goggles.

**Skin contact:** Where contact is likely, wear chemical-resistant (such as nitril or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

**Inhalation:** A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|                               |  |
|-------------------------------|--|
| <b>Appearance:</b>            | Liquid                                   |
| <b>Colour:</b>                | Light brown                              |
| <b>Flash Point:</b>           | 64°C                                     |
| <b>Melting Point:</b>         | 78.6°C                                   |
| <b>Density:</b>               | 1,40g/cm <sup>3</sup> @ 20°C             |
| <b>Vapour pressure:</b>       | 3.3 x 10 <sup>-5</sup> mPa @ 25°C        |
| <b>pH Value:</b>              | 5-8 (1%, in deionised water) CIPAC MT 75 |
| <b>Solubility:</b>            | 15mg/l @ 25°C                            |
| <b>Partition coefficient:</b> | KowlogP = 4.20 @ 25°C.                   |

**10. STABILITY AND REACTIVITY**

|  |   |
|--|---|
| <b>Stability:</b>                        | Stable under normal use and storage conditions.         |
| <b>Hazardous polymerization:</b>         | Will not occur  |
| <b>Conditions to avoid:</b>              | None known  |
| <b>Hazardous decomposition products:</b> | Can decompose at high temperatures forming toxic gases. |
| <b>Materials to avoid:</b>               | Strong oxidizers.                                       |

**11. TOXICOLOGICAL INFORMATION**

|  |   |
|--|---|
| <b>Acute oral LD<sub>50</sub>:</b>       | 3500 mg/kg (rats)   |
| <b>Acute dermal LD<sub>50</sub>:</b>     | > 2000 mg/kg in rats                                      |
| <b>Acute inhalation LC<sub>50</sub>:</b> | >4.56 mg/l of air in rats.                                |
| <b>Acute skin irritation:</b>            | This product is classified as non-irritating to the skin. |
| <b>Acute eye irritation:</b>             | This product is classified as non irritating to the eyes  |
| <b>Dermal sensitization:</b>             | Non sensitizer  |

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## 12. ECOLOGICAL INFORMATION

### ECOTOXICOLOGY

#### Acute oral LD<sub>50</sub>:

Mallard (9-11d) > 2150 mg/kg

Bobwhite feeding LC<sub>50</sub> (8d) > 4760 mg/kg

Mallard feeding LC<sub>50</sub> > 5000 mg/l

#### Toxicity to fish:

LC<sub>50</sub> (96h): rainbow trout 0.8 mg/l

Bluegill 1.2 mg/l

#### Earthworm

LC<sub>50</sub> (14d) > 610 mg/l soil

#### Daphnia

LC<sub>50</sub> (14d): 0.77 mg/l

#### Bees

Not toxic to bees. LD<sub>50</sub> (oral) > 187 ug/bee. LD<sub>50</sub> (contact) > 100 ug/bee

## 13. DISPOSAL CONSIDERATION

Do not reuse product containers. Dispose of product containers, waste containers and residues according to local, state, and federal health and environmental regulations.

## 14. TRANSPORT INFORMATION

UN No.: 3082

#### Road Transport ADR/IRD:

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, liquid, N.O.S. (difenoconazole 250 g/l)

#### Maritime Transport IMDG/IMO:

Class: 9

Packing group: III

Shipping name: Environmentally hazardous substance, liquid, N.O.S. (difenoconazole 250 g/l)

## 15. REGULATORY INFORMATION

Not applicable

## 16. OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the products as such. In case of new formulation or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipients subsequently produce formulations containing this product, it is the recipients' sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.