

\*- BIOPESTICIDE PRODUCT - \*



#### 1. IDENTIFICATION

**Product Name: ACHIEVE** 

Manufacturer: The Real IPM Company (K) Ltd,

P.O. Box 4001, Madaraka, Thika 01002, Kenya

Physical address: Kichozi Farm, Thika

Distributor: The Real IPM Company (K) Ltd,

P.O. Box 4001, Madaraka, Thika 01002, Kenya

Kichozi Farm, Thika

**General Use**: Biological miticide

Common Name : | ACHIEVE

**Emergency Phone Number** : | +254 725 806 086

# 2. COMPOSITION/ INFORMATION ON INGREDIENTS

Metarhizium anisopliae ICIPE 78 1.0 x 109 cfu/ml

(0.005% w/w)

### 3. HAZARDS IDENTIFICATION

**Emergency overview:** This product is not considered to be hazardous to humans or to

the environment. The product is not toxic, infective or pathogenic

via ingestion, skin contact or inhalation.

**Inhalation**: It is not considered as a risk.

**Skin/Eye contact:** It may cause mild irritation.

**Ingestion:** Active ingredient has shown no mammalian toxicity.

Chronic: No known effects.

Carcinogenicity: The ingredients in this product are not listed by NTP, OSHA, or IARC

as a carcinogen.

### 4. EMERGENCY AND FIRST AID MEASURES

**Inhalation**: This product is not considered to be a risk to the respiratory system

**Skin contact**: Remove contaminated clothing. Wash thoroughly with soap and

water immediately. Get medical attention if irritation develops.

**Eye contact**: In cases of contact, hold eyelids apart and immediately flush eyes

with plenty of water for at least 15 minutes. Call a physician.

**Ingestion**: Call a physician if a large amount is swallowed. Do not give

anything by mouth to an unconscious person



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### 5. FIRE FIGHTING MEASURES

**General**: Use methods and protective gear that are appropriate for the

conditions and size of the fire.

**Extinguishing media:** This product is neither flammable nor explosive. Use appropriate

media for underlying cause and combustibles involved in the fire.

# **6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Wear suitable clothing such as long-sleeved shirt and trousers,

waterproof gloves and boots.

**Methods for clean up:** Carefully mop and place in a closed container for disposal.

Rinse area with water.

# 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin and eyes.

Remove contaminated clothing and wash before reuse.

Wash hands thoroughly before eating, drinking, chewing gum,

using tobacco or using the toilet.

**Storage**: Do not contaminate water, food or feed by storage and disposal.

Store in tightly closed, original container, in a cool dry place away

from direct sunlight

Do not store for more than 6 months.

# 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal Protection: W

When opening or dumping containers, or other operations where mists may be created, wear a mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with an approximate N-95, R-95, P-95 or HE filter for biological products. Applicators and other handlers must wear: long-sleeved shirt, long pants, socks and shoes, waterproof gloves and boots.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** greenish liquid

**Odor**: earthy odor

Vapor pressure : not determined Specific gravity : not determined

**Solubility in water:** dispersible in water

Melting point : not determined

Boiling point : not determined

Viscosity : not determined



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### 10. STABILITY AND REACTIVITY

Stability: Stal

Stable, material is non-reactive

**Hazardous Polymerization:** 

Will not occur.

Hazardous decomposition products:

None anticipated.

### 11. TOXICOLOGICAL INFORMATION

Active ingredient is practically non-toxic, non-allergenic and non-pathogenic to mammals.

Acute Oral LD50 (Rat):

 $> 5.0 \times 10^{10} \text{ cfu/Kg bw}$ 

Acute Inhalation LD50 (Rat):

> 5.0 mg/L air

Infectivity/ Pathogenicity:

1x10<sup>7</sup> cfu/rat (not infective or pathogenic)

# 12. ECOLOGICAL INFORMATION

**Ecological Information:** 

With regard to environmental fate and behavior this product is not expected to impose any environmental risk. *Metarhizium anisopliae* is widely distributed in insects and soil but not able to grow out from dead chitinous substrates into adjacent non sterile soil. Due to the rapid degradation of dextruxin in insect cadavers it is not likely that these compounds contaminate the soil or ground water.

**Ecotoxicity Information:** 

It can be concluded from test results with this product in aquatic vertebrates and invertebrates, and in various terrestrial vertebrates and invertebrates that this product is non-toxic to the species tested and is not expected to impose any environmental risk.

# 13. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Dispose of empty container in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### 14. TRANSPORT INFORMATION

Transport in cool dry place and use within 6 months

#### 15. OTHER INFORMATION

SDS SUMMARY: SDS revised 4<sup>th</sup> June 2018

**CONTACT:** The Real IPM Company +254 725 806 086



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