

## MATERIAL SAFETY DATA SHEET

### PENCO 10% EC

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE

**Trade Name:** Penco 10% EC

**Active Ingredient:** Penconazole

**Chemical Classification:** Triazole

**Chemical Name:** 1-(2,4-dichloro- $\beta$ -propylphenethyl)-1H-1,2,4-triazole (IUPAC)

**Chemical Formula:**  $C_{13}H_{15}Cl_2N_3$

**USE:** Fungicide

**Formulation:** Emulsifiable concentrate

#### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Conc.
<b>Active ingredient</b>	
Penconazole	10%
<b>Inert ingredient</b>	
Emulsifier	12%
Solvent	Up to 100%

#### SECTION 3. HAZARDS IDENTIFICATION

##### **Risk Phrases**

R36 Irritating to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### **Safety Phrases**

S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using do not eat, drink or smoke.

S35 This material and its container must be disposed of in a safe way.

S57 Use appropriate containment to avoid environmental contamination

## **SECTION 4.FIRST AID MEASURES**

---

### **Ingestion:**

If victim is fully conscious, have the person sip a glass of water if able to swallow. Do not induce vomiting unless instructed to do so by a physician. Never give anything by mouth, or attempt to induce vomiting, in an unconscious or convulsing person.

### **Inhalation:**

Move person from contaminated area to fresh air. If the individual is not breathing, call an ambulance and begin artificial respiration.

### **Eye Contact:**

Immediately flush eyes repeatedly with large amounts of clean, running water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Hold eyelids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

### **Skin Contact:**

Remove contaminated clothing. Using plenty of soap and water, wash then rinse skin, hair and under fingernails for 15-20 minutes. Do not apply any medicating agents except on the advice of a physician. Obtain medical attention if irritation persists.

### **Note to Physician:**

No specific antidote is available. If poisoning is suspected apply symptomatic therapy.

## **SECTION 5.FIRE FIGHTING MEASURES**

---

**Suitable Extinguishing Media:** Extinguishing media - small fires Use water spray, alcoholresistant foam, dry chemical or carbon dioxide extinguisher. DO NOT use direct jet of water. Extinguishing media - large fires Use alcohol-resistant foam

**Hazards from Combustion Products:** This product contains combustible organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health. Flash back possible over considerable distance.

**Special Protective Precautions and Equipment for Fire Fighters:** Wear full protective clothing and self-contained breathing apparatus.

## **SECTION 6.ACIDENTAL RELEASE MEASURES**

---

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimize further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
  - For quantities up to 50 L of product bury in a secure landfill site.
  - For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable

## **SECTION 7.HANDLING AND STORAGE**

---

Store in the tightly sealed, original containers in a dry, secure, well-ventilated place away from fertilizers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorized persons and animals. Wash thoroughly with soap and water after handling. Always wash thoroughly after handling. Remove contaminated clothing promptly, and wash it before wearing again. Wear personal protective equipment (see Section 8) when applying ACHIEVE Liquid.

## **SECTION 8.EXPOSURE CONTROL/PERSONAL PROTECTION**

---

Avoid contact with eyes and skin. Do not inhale spray mist.

When preparing the spray wear:

- cotton overalls buttoned to the neck and wrist,
- a washable hat,
- elbow-length PVC gloves,
- impervious footwear and
- a face-shield or goggles.

If clothing becomes contaminated with product remove clothing immediately. If product gets on skin immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Physical state</b>	liquid
<b>Color</b>	Yellow
<b>Density</b>	0.88 gm /cm <sup>3</sup> ( CIPAC F p.11 MT 3 )
<b>pH value</b>	4.6 (CIPAC F p.205 MT 75 )
<b>Acidity</b>	0.3% as H <sub>2</sub> SO <sub>4</sub>
<b>Alkalinity</b>	0.1% as NaOH
<b>Corrosion</b>	Non corrosion
<b>Flash point</b>	75 °C

## SECTION 10. STABILITY AND REACTIVITY

---

### **Chemical Stability:**

Stable under normal use and storage conditions

### **Conditions to avoid:**

None known

### **Materials to Avoid:**

Can decompose at high temperatures, forming toxic gases

### **Hazardous Polymerization:**

Material is not known to polymerize.

## SECTION 11. TOXICOLOGICAL INFORMATION

---

**Acute: Oral toxicity:** LOW TOXICITY Tests on rats indicate this product has a low toxicity following single doses of a similar formulation. (LD<sub>50</sub> = 2,574 mg/kg)

**Dermal toxicity:** LOW TOXICITY Tests on rabbits indicate this product has a low toxicity following skin contact with a similar formulation. (LC<sub>50</sub> = >4000 mg/kg)

**Inhalation:** LOW TOXICITY Tests on rats indicate this product is not harmful due to inhalation of a similar formulation. (LC<sub>50</sub> (4h) = >5.294 mg/L air)

**Skin irritation:** Slight irritant

**Eye irritation:** Moderate irritant

**Sensitisation:** Not a sensitiser

**Chronic:** Penconazole technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic neurotoxic or reproductive effects.

## SECTION 12. ECOLOGICAL INFORMATION

---

Available data for Penconazole technical:

**Birds:** Practically non-toxic to bird

Acute oral LD50 for mallard ducks > 1500 mg/kg. Dietary LC50 (8 d) for mallard ducks > 5600 ppm. Dietary LC50 (8 d) for bobwhite quails > 5600 ppm.

**Fish:** Moderately toxic to fish

LC50 (96 h) for rainbow trout 3.1 mg/L. LC50 (96 h) for bluegill sunfish 2.2 mg/L.

**Bees:** Moderately toxic to bees

Non-toxic to bees. LD50 (oral) > 5 µg/bee, LD50 (contact) > 100 µg/bee

**Daphnia:** Moderately toxic to daphnia

EC50 (48 h) > 5 mg/L.

**Algae:** Moderately toxic to algae

EC50 (96h) for *Selenastrum capricornutum* 0.85 mg/L.

**Earthworm:** Practically non-toxic to earthworm

LC50 for *Eisenia fetida* > 1000 mg a.i./kg soil

## SECTION 13. DISPOSAL INSTRUCTION

---

**Dispose of empty, used containers by:**

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

## **SECTION 14. TRANSPORT INFORMATION**

---

Transport Classification: Road & Rail (ADG), Sea (IMDG)

UN NO.: 1993

IMO class: 3

Packing Group: III

## **SECTION 15. REGULATORY INFORMATION**

---

Acute: Yes

Chronic: Yes

Fire: Yes

Reactivity: No

Read and follow all label directions.

## **SECTION 16. OTHER INFORMATION**

---

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements.