



**MATERIAL SAFETY DATA SHEET**  
**AMIZOL 5 EC**

**IDENTIFICATION OF THE SUPPLIER:**

**Agro Chemical Industries Ltd (ACI).**  
**P.O.Box 183020 Amman 11118 Jordan**  
**Telephone: +962 6 5548224/5**  
**Fax +962 6 5548220**  
**E-mail: info@aci.com.jo**

**PRODUCT IDENTIFICATION:**

**Common name:** Hexaconazole.5% w/v  
**Trade Name:** Amizole 5 EC  
**Chemical name:** (RS) -2- (2,4-dichlorophenyl)-1- (1H-1,2,4- triazol -1-yl) hexan -2 - 01.  
**Molecular weight:** 314.2  
**Molecular formula:** C<sub>14</sub>H<sub>17</sub>Cl<sub>2</sub>N<sub>3</sub>O

**PRODUCT COMPOSITION:**

<i>Active ingredient</i>	<i>CAS#</i>	<i>% w/v</i>
Hexaconazole	[79983 – 71 – 4]	5 %
<i>Inert ingredient</i>		
Emulsifier		7 %
Solvent		Up to 100 %



## HAZARD IDENTIFICATION:

### Potential Health Effects: Emergency Overview

#### Human

**Eyes:** Can cause temporary mild irritation.

**Skin** Can cause a slight irritation on more sensitive areas (face, eyes, and mouth)

**Ingestion:** Can cause stomach irritation resulting in nausea, cramps and vomiting. Large does may cause nasal and respiratory irritation.

**Inhalation:** Excessive Inhalation can cause nasal and respiratory irritation.

**Ecological:** Slight toxic to fish and aquatic life.

## FIRST AID MEASURES:

**If swallowed:** give one to two glasses of water to induce vomiting and call a physician immediately.

**If inhaled:** remove victim to fresh air, apply artificial respiration if indicated.

**If on Skin:** remove contaminated clothing immediately and wash the skin with soap and water

**If in Eyes:** flush eyes with plenty of water for at least 15 min., call the physician if irritation persists

**Antidote if it is available:** No specific antidote, symptomatic treatment is recommended

## FIRE FIGHTING MEASURES:

### Flammable properties:

**Flash point:** >45 °C

### Extinguishing Media:

Water spray, foam, dry powder, carbon dioxide or sand.



### **Protective Equipment for fire-fighting:**

Do not breathe fumes, wear self contained breathing apparatus.

### **Fire Fighting Instructions:**

Remove all ignition sources. Use a full faced self containing breathing apparatus along with full protective gear. Keep near by containers and equipment. Cool with a water stream. Contain the run off if possible for proper disposal.

## **ACCIDENTAL RELEASE MEASURES:**

### **Personal Precaution:**

Avoid contact with spilled material or contaminated sources. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing.

### **Small Spill:**

Shut off ignition sources. Stop release Dike or contain release and access to the release area. Take actions to reduce vapour dilute with absorbent materials like sand/saw dust. Clean spill areas of residues and absorbent.

### **Large spill:**

Shut off ignition sources stop release dike or contain release. Isolate and control access to the release area. Take action to reduce vapors. Collect product in to drums and clear spillers.

## **HANDLING AND STORAGE:**

### **Handling:**

Wear chemically impervious gloves such as neoprene or nitrile. Wear safety glasses/goggles or face shield. Use mechanical ventilation should be used when handling this product in enclosed spaces. Read and observe all precautions and instructions on the label.

### **Storage:**

Store in original containers, up right and closed. Store in areas that are cool, dry and well-ventilated. Store away from seeds, fertilizers and animal feed stuffs.



## EXPOSURE CONTROLS/ PERSONAL:

### Engineering Controls:

Mechanical ventilation should be used when handling this product in enclosed spaces.

### Respiratory Protection:

NIOSH approved organic vapor respirator in absence of mechanical ventilation.

### Hand Protection:

Wear chemical resistant PVC or nitrile gloves.

### Eye Contact:

Wear safety glasses, goggles and face shield.

### Other:

Wear PVC or chemical resistant, disposable overalls and PVC boots.

## PHYSICAL AND CHEMICAL PROPERTIES

**Assay:** "Hexaconazole " 50 g/L

**Appearance:** Clear Yellow Liquid

**Density:** 0.92 g/ml  $\pm$  0.05

**Flash Point:** >45 °C

**pH (alkalinity or acidity in % H<sub>2</sub>SO<sub>4</sub>):** neutral

**Solubility in Water:** Forms Emulsion

## STABILITY AND REACTIVITY

**Stability:** Stable for two years at under normal temperature

**Incompatibility:** Strong acidic / alkaline materials

**Hazardous polymerization:** will not occur.

**Hazardous Decomposition products:**

Not applicable at ambient temperature.



## TOXICOLOGICAL INFORMATION

### Toxicology Data: (Technical)

Eye: Mild irritation to eyes (rabbit).  
Skin: No irritation to skin (Rabbit), moderate skin sensitizer (guinea pig).  
Acute dermal LD50: >2000 mg/kg (rat)  
Acute Oral LD50: 2189 mg/kg (male rat)  
Acute Oral LD50: 6071 mg/kg (female rat)  
Inhalation: LC50 (4 h) >5.9 mg/l. (rat)  
Carcinogenicity: Non Carcinogenic  
Reproduction: No teratogenic effects  
Mutagenicity: Non mutagenic. Did not cause any chromosomal effects. Did not cause any DNA single strand damage.

## ECOLOGICAL INFORMATION

### Persistence in environment:

Slightly mobile in soil and non persistent in aquatic organisms

### Toxic effects on organisms: (Technical)

Fish LC50 96 h: 5.94 mg/l (mirror carp)  
3.4 mg/l (Rainbow Trout)  
Daphnia LC50 (48h) 2.9 mg/l  
Acute LD50 Bees: >0.1 mg/bee. (Oral and contact)

### Birds:

Acute oral LD50: >4000 mg/kg (Mallard ducks)

## DISPOSAL CONSIDERATION

### Product Disposal:

Disposal of product will usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.

### Container Disposal:

Lightly contaminated packaging may be accepted for land fill, otherwise incineration is required.

