## **HEXACONAZOLE 5% SC**

## **MATERIAL SAFETY DATA SHEET**

### 1. Product and Company Identification

**Product Name**: Hexaconazole 5% SC

Chemical Name : (RS)-2-(2,4-dichlorophenyl)-1-(1H-1,2,4-triazol-1-yl)hexan-2-ol

Type : Fungicide

 $\mbox{Molecular formula} \quad : \quad C_{14} H_{17} C I_2 N_3 O$ 

### 2. Composition / Information on ingredients

Chemical Name	CAS#	Percent or content (w/w)
Hexaconazole (based on 92% purity)	79983-71-4	5.43 %
Other ingredients	-	94.57 %

#### 3. Health Hazards Identification

**Eye contact** Non-irritant to mucous membrane of eyes of rabbits.

**Skin contact** Non-irritant to skin of rabbits.

**Ingestion** Harmful if swallowed.

**Environment** Dangerous for the environment. Very toxic to aquatic organisms, may

cause long-term adverse effects in the aquatic environment.

#### 4. First Aid Measures

**Eyes** Dangerous for the environment. Very toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

**Skin** Carefully remove contaminated clothing. Wash affected area with soap and

water. Seek medical aid if required.

**Ingestion** If the material was swallowed and signs of toxicity are severe, induce

vomiting. Keep the person calm and comfortable and obtain medical

assistance as soon as possible.

Inhalation If inhaled, remove to fresh air and keep at rest. Obtain medical aid if

required.

### 5. Fire Fighting Measures

Flash point Non-flammable

Special exposure hazards Combustion or thermal decomposition will evolve toxic and

irritant vapours.

Suitable extinguishing

media

If product is involved in a fire, use water spray, foam, dry

powder, carbon dioxide or sand.

Fire fighting precaution Do not breathe fumes. Wear self contained breathing apparatus.

Fire fighting guidance Whenever hexaconazole is involved in a major fire, advise the

> fire service to wear protective clothing and breathing apparatus. Inform the fire service and other relevant authorities that Hexaconazole is toxic to aquatic organisms, and that water should be used only to cool unaffected stock. In this way, the

accumulation of polluted run-off from the site is prevented.

#### 6. Accidental Release Measures

Avoid contact with spilled material or contaminated surfaces. If **Personal precaution** 

> ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear

personal protective clothing.

**Environmental** 

precautions

Keep people and animals away. Prevent entry into drains, sewers and

watercourses.

Methods and material

for containment and

cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

### 7. Handling and Storage

Handling Wear chemically impervious gloves such as neoprene or nitrile. Wear safety

> glasses, goggles or face shield. 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, upright and closed. Store in areas that are cool, dry

and well ventilated. Store away from seeds, fertilizers and animal feed stuff.

### 8. Exposure Controls/Personal Protection

Mechanical ventilation should be used when handling this product **Engineering controls** 

in closed spaces.

Respiratory protection NIOSH approved organic vapor respirator in absence of mechanical

ventilation.

Eye protection Wear safety goggles with imperforated side shield and face shield.

**Hand Protection** Wear chemical resistant gloves.

**Skin Protection** Avoid contact with skin. Wear apron, boots and full protective suit.

controls

Environmental exposure Keep away from food, drink and animal feed stuff. This material and

its container must be disposed off as hazardous waste. Avoid

release to the environment.

### 9. Physical and Chemical Properties

**Appearance** white

**Physical state** liquid

odourless Odour

Density 1.04 g/ml

Stability in water emulsify in water

### 10. Stability and Reactivity

**Stability** Stable for two years at ambient conditions

Conditions to avoid Avoid excessive heat and flame
Incompatibilities Strong acidic / alkaline materials

Materials to avoid None under normal condition of use

Hazardous decomposition Thermal decomposition may release ammonia, carbon monoxide

**Products** and carbon dioxide and oxides of nitrogen.

### 11. Toxicological Information

Acute Oral Toxicity  $LD_{50}$  (rats) > 2000 mg/kg

Acute Dermal Toxicity  $LD_{50}$  (Rats) > 2,000 mg/kg b.w

**Acute Inhalation** LC<sub>50</sub> (rats): >5.9 mg/l

**Eye Irritation** Rabbit: Moderate Irritant

**Skin Irritant** Rabbit: Non irritant

**Skin sensitization** Non sensitizer

### 12. Ecological Information

Birds Acute oral LD<sub>50</sub> for (8 d) for Mallard ducks >4000 mg/kg

**Fish** Fish:  $LC_{50}$  (96 h) for Rainbow trout 3.4 mg/l,

Mirror carp 5.94 mg/l

Sheepshead minnows 5.4 mg/l

**Bees** LD<sub>50</sub> (Oral, Contact, 48 h) : 0.1 mg / bee

### 13. Disposal Considerations

Waste Disposal Method Do not empty into drains or waterways. Disposal of product would usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.

**Container Disposal** 

method

Lightly contaminated packaging may be accepted for landfill, otherwise

incineration will be required.

### 14. Transport Information

### Rail/Road (RID/ADR)

Proper Shipper Name : PESTICIDE LIQUID, TOXIC, N.O.S

Class : 6.1
UN No. : 2902
Packing Group : III

Sea (IMDG – Code)

Proper Shipper Name : PESTICIDE LIQUID, TOXIC, N.O.S

Class : 6.1
UN No. : 2902
Packing Group : III
Marine Pollutant : Yes

Air (ICAO/IATA)

Proper Shipper Name : PESTICIDE LIQUID, TOXIC, N.O.S

Class : 6.1
UN No. : 2902
Packing Group : III

**Packing Instructions:** 

Packing instructions on sea: P001/LP01 Packing instructions on air: Y611/618

### 15. Regulatory Information

Symbol Xn Harmful

Special Risks (R-Phrases) R22 Harmful if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment

Safety Advice (S- Phrases)	S 2	Keep out of the reach of children	
	S24/25	Avoid contact with skin and eyes.	
	S36/37 S57	Wear suitable protective clothing and gloves Use appropriate containment to avoid environmental contamination.	
	S60	This material and its container must be disposed of as hazardous waste.	
	S61	Avoid release to the environment. Refer to special instructions/safety data sheets.	
International WHO Toxicity Classification	IV	Non-toxic	

#### 16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.