# MATERIAL SAFETY DATA SHEET



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#### TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300 INTERNATIONAL: (703) 527-3887

# NON-TRANSPORTATION

LANXESS Emergency Phone: (800) 410-3063 LANXESS Information Phone: (800) LANXESS

# 1. Product and Company Identification

**Product Name:** PREVENTOL CI 7-100

Material Number: 140329 Chemical Family: Azole

Chemical Name: 1H-Benzotriazole, methyl-

Synonyms: Tolyl triazole, Methylbenzotriazole

**CAS-No.:** 29385-43-1 **Formula:** C7H7N3

#### 2. Hazards Identification

#### **Emergency Overview**

CAUTION! Color: Light, Beige Form: Solid Granules Odor: Slight.

Dust/air mixtures may be a fire and explosion hazard when exposed to high temperature or ignition sources. May cause respiratory tract irritation. May cause eye irritation. May be harmful if swallowed.

#### **Potential Health Effects**

**Primary Routes of Entry:** Inhalation, Skin Contact, Eye Contact, Ingestion

Medical Conditions Aggravated by

**Exposure:** 

Respiratory disorders, Eye disorders

#### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

# **Inhalation**

**Acute Inhalation** 

For Component: Tolytriazole

May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

# <u>Skin</u>

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#### Acute Skin

For Component: <u>Tolytriazole</u>

Not expected to be irritating.

#### **Eye**

**Acute Eye** 

For Component: <u>Tolytriazole</u>

May cause irritation with symptoms of reddening, tearing and stinging.

# **Ingestion**

**Acute Ingestion** 

For Component: <u>Tolytriazole</u>

Moderately toxic by ingestion. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

# **General Effects of Exposure**

**Chronic Effects of Exposure** 

For Product: PREVENTOL CI 7-100

No applicable information was found concerning any adverse chronic health effects.

# **Carcinogenicity:**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA.

## 3. Composition/Information on Ingredients

#### **Hazardous Components**

#### 4. First Aid Measures

#### **Eye Contact**

In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

### **Skin Contact**

In case of skin contact, wash affected areas with soap and water.

# Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if irritation develops.

# Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

# 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** All extinguishing media are suitable.

# **Special Fire Fighting Procedures**

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic

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and irritating fumes. Avoid dusting.

#### **Unusual Fire/Explosion Hazards**

Dust may form explosive mixtures with air. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

#### 6. Accidental release measures

#### Spill and Leak Procedures

Cleanup personnel must use appropriate personal protective equipment. Remove all sources of ignition, including flames, heat, and sparks. Use explosion-proof equipment. Use grounded or non-sparking tools and equipment. Remove mechanically by a method that minimizes the generation of airborne dust (vacuum cleaner, wet mopping, etc.) Ensure vacuum cleaners are approved for explosible dusts. Do not use compressed air for cleaning. Collect and place in appropriately marked sealable containers for disposal.

#### 7. Handling and Storage

**Storage Temperature:** 

**maximum:** 50 °C (122 °F)

**Storage Period** 

12 Months

#### **Handling/Storage Precautions**

This product may form explosible dust/air mixtures. Avoid creating dust and dust clouds Remove all sources of ignition, including flames, heat, and sparks. Ground and bond containers and equipment before transferring to avoid static sparks. Use non-sparking tools and equipment. Consult National Fire Protection Association (NFPA) 654 Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids for details on the safe handling and equipment design. Avoid breathing dust. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use.

### **Further Info on Storage Conditions**

Store in a cool dry place. Store in original or similar containers. Minimize dust generation and accumulation, especially on elevated surfaces (e.g., roof beams and trusses, ventilation ducts, wall sills). A dust layer just 1/32nd of an inch(0.793 mm) deep on elevated surfaces may create a dust cloud explosion hazard. Protect equipment (e.g. storage bins, conveyors, dust collectors) with explosion vents. Avoid extreme heat.

#### 8. Exposure Controls / Personal Protection

Country specific exposure limits have not been established or are not applicable

#### **Industrial Hygiene/Ventilation Measures**

Use local and general exhaust ventilation to control levels of exposure.

#### **Respiratory Protection**

A NIOSH approved dust respirator should be worn if inhalation of dust is a problem.

#### **Hand Protection**

rubber gloves, Polyvinyl chloride (PVC/vinyl) gloves.

#### **Eye Protection**

Chemical safety goggles or safety glasses with side-shields.

#### Skin and body protection

Wear cloth work clothing including long pants and long-sleeved shirts.

## **Additional Protective Measures**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

## 9. Physical and chemical properties

Form: Solid
Appearance: Granules
Color: Light, Beige
Odor: Slight

**pH:** Approximately 7 @ 1 g/l Boiling Point/Range:  $> 200 \, ^{\circ}\text{C} (> 392 \, ^{\circ}\text{F})$ 

**Flash Point:** Approximately 180 °C (356 °F) (DIN 51376)

Vapor Pressure:0.00001 mbar @ 25 °C (77 °F)Specific Gravity:Approximately 1.13 @ 100 °C (212 °F)Solubility in Water:Approximately 5 g/l @ 20 °C (68 °F)Autoignition Temperature:Approximately 400 °C (752 °F)Decomposition Temperature:Approximately 160 °C (320 °F)

**Bulk Density:** Approximately 550 kg/m3

Molecular Weight: 133.2

#### 10. Stability and Reactivity

#### **Hazardous Reactions**

Hazardous polymerization does not occur. Exposure to high temperature causes exothermic reaction or decomposition.

#### **Stability**

Stable

#### Materials to avoid

Oxidizing agents, Reducing agents

#### Conditions to avoid

Avoid extreme heat.

#### **Hazardous decomposition products**

By Fire and Thermal Decomposition: Carbon oxides, nitrogen oxides (NOx), other potentially toxic fumes

# 11. Toxicological Information

# **Toxicity Data for Tolytriazole**

#### **Acute Oral Toxicity**

LD50: 625 - 1,830 mg/kg (Rat)

LD50: 720 mg/kg (Rat)

#### **Acute Inhalation Toxicity**

LC0: > 1.7 mg/l, 1 hrs (Rat, Male/Female)

#### Acute dermal toxicity

LD50: > 4,000 mg/kg (rabbit, Male/Female)

#### **Skin Irritation**

rabbit, Exposure Time: 4 hrs, Non-irritating

#### **Eye Irritation**

rabbit, Irritating to eyes. rabbit, Non-irritating

#### Sensitization

dermal: non-sensitizer (Guinea pig, Maximisation Test (GPMT))

#### **Repeated Dose Toxicity**

29 Days, oral: NOAEL: 150 mg/kg, (Rat, )

#### Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic

Activation: with/without)
Genetic Toxicity in Vivo:
Micronucleus Assay: negative

# 12. Ecological Information

# Ecological Data for Tolytriazole

# Biodegradation

Aerobic, 77 %, Exposure time: 28 Days

4 %, Exposure time: 28 Days

#### Theoretical Biological Oxygen Demand (ThBOD)

1,562 mg/g

# **Acute and Prolonged Toxicity to Fish**

LC50: 65 mg/l (Zebra fish (Brachydanio rerio), 96 hrs)

LC50: 31 mg/l (Bluegill (Lepomis macrochirus), 96 hrs)

LC50: 25.5 mg/l (Fathead minnow (Pimephales promelas), 96 hrs)

#### **Acute Toxicity to Aquatic Invertebrates**

EC50: Approximately 35.4 mg/l (Water flea (Daphnia magna), 48 hrs)

#### **Toxicity to Aquatic Plants**

EC50: 32 mg/l, End Point: biomass (Green algae (Scenedesmus subspicatus), 72 hrs)

EC50: 62 mg/l, End Point: growth (Green algae (Scenedesmus subspicatus), 72 hrs)

# **Toxicity to Microorganisms**

EC50: 330 mg/l, (Activated sludge microorganisms, 3 hrs)

#### 13. Disposal considerations

#### **Waste Disposal Method**

Waste disposal should be in accordance with existing federal, state, provincial, and/or local environmental control laws.

#### **Empty Container Precautions**

Recondition or dispose of empty container in accordance with governmental regulations. Label precautions also apply to this container when empty.

#### 14. Transportation information

#### Land transport (DOT)

Non-Regulated

# Sea transport (IMDG)

Non-Regulated

#### Air transport (ICAO/IATA)

Non-Regulated

# 15. Regulatory Information

# **United States Federal Regulations**

**OSHA Hazcom Standard Rating:** Hazardous

**US. Toxic Substances Control Act:** Listed on the TSCA Inventory.

## US. EPA CERCLA Hazardous Substances (40 CFR 302):

#### Components

None

# SARA Section 311/312 Hazard Categories:

Acute Health Hazard

# US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

## Components

None

# US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

# **Components**

None

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# US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

## **State Right-To-Know Information**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

# Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Weight %	<u>Components</u>	CAS-No.
>=95%	Tolytriazole	29385-43-1

## California Prop. 65:

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

#### 16. Other Information

#### NFPA 704M Rating

Health	1
Flammability	1
Reactivity	0
Other	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

#### **HMIS Rating**

Health	1
Flammability	1
Physical Hazard	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

LANXESS Corporation's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS Corporation as a customer service.

Contact Person: Product Safety Department

Telephone: (800) LANXESS

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<sup>\* =</sup> Chronic Health Hazard

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