

MATERIAL SAFETY DATA SHEET

LANXESS

Energizing Chemistry

LANXESS Corporation
Product Safety & Regulatory Affairs
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USA

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: Toly 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.

Skin

Acute Skin

For Component: Tolytriazole

Not expected to be irritating.

Eye

Acute Eye

For Component: Tolytriazole

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

Ingestion

Acute Ingestion

For Component: Tolytriazole

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

Weight %

>=95%

Components

Tolytriazole

CAS-No.

29385-43-1

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 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. 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. 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. 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 °C (> 392 °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/m ³
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 (NO_x), 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

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:

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
>=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

* = Chronic Health Hazard

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
MSDS Number: R304622
Version Date: 06/06/2007
Report Version: 2.5

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