MATERIAL SAFETY DATA SHEET

LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
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 7-50
Material Number: 56240989
Chemical Family: Benzene/toulene derivative
Chemical Name: Tolyltriazole, sodium salt, aqueous solution

2. Hazards Identification

Emergency Overview
DANGER! Color: Yellow to amber Form: Liquid Odor: Characteristic.

Potential Health Effects
Primary Routes of Entry: Skin Contact, Eye Contact, Ingestion, Inhalation
Medical Conditions Aggravated by Exposure: Skin disorders, Respiratory disorders, Eye disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Acute Inhalation
For Component: 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt
Corrosive with symptoms of coughing, burning, ulceration, and pain.

Acute Skin
For Component: 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt
Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

Acute Eye
For Component: 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt
Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.

**Acute Ingestion**
For Component: 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt
Corrosive to the digestive tract with symptoms of burning and ulceration. Moderately toxic by ingestion.

**General Effects of Exposure**

**Chronic Effects of Exposure**
For Product: PREVENTOL CI 7-50
No applicable information was found concerning any adverse chronic health effects from overexposure to this product.

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

### 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight %</td>
<td>&lt;=50%</td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td>1H-Benzotriazole, 4(or 5)-methyl-, sodium salt</td>
<td>64665-57-2</td>
</tr>
</tbody>
</table>

### 4. First Aid Measures

**Eye Contact**
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Call a physician immediately.

**Skin Contact**
Wash off immediately with plenty of water for at least 15 minutes. Immediately remove contaminated clothing and shoes. Call a physician immediately. Wash clothing and shoes before reuse.

**Inhalation**
If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately.

**Ingestion**
Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate 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. Use cold water spray to cool fire-exposed containers to minimize risk of rupture.

**Unusual Fire/Explosion Hazards**
Water runoff from fire fighting may be corrosive. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Tolytriazole has the potential to be thermally hazardous. In
measurements by Accelerating Rate Calorimetry (ARC) exothermic behavior exceeding 0.02 C/min may be observed at temperatures above 240 C for 50% aqueous solutions.

6. Accidental release measures

Spill and Leak Procedures
Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e.g., dry sand or earth) and collect for proper disposal. Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems.

7. Handling and Storage

Storage Temperature:
minimum: 0 °C (32 °F)

Storage Period
24 Months

Handling/Storage Precautions
Do not breathe vapours or spray mist. Do not get on skin or clothing. Do not get in eyes. Do not taste or swallow. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Protect from freezing.

Further Info on Storage Conditions
When stored at temperatures below 32 F (0 C) some of the product may crystallize out. This can be dissolved again by heating the product to a maximum of 122 F (50 C).

8. Exposure Controls / Personal Protection

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

Industrial Hygiene/Ventilation Measures
General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Respiratory Protection
A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

Hand Protection
Permeation resistant gloves., Polychloroprene gloves., Polyvinyl chloride (PVC/vinyl) gloves.

Eye Protection
splash proof goggles., face-shield.

Skin and body protection
Permeation resistant clothing and foot protection.

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: Liquid
Color: Yellow to amber
Odor: Characteristic
pH: 11.5 - 12
Boiling Point/Range: Approximately 13.5 °C (20 °C (68 °F))
Flash Point: 106 °C (222.8 °F)
Vapor Pressure: 0.04 mmHg @ 20 °C (68 °F)
Density: Approximately 1.18 g/cm³ @ 20 °C (68 °F)
Specific Gravity: 1.19 @ 24 °C (75.2 °F)
Solubility in Water: Miscible
Autoignition Temperature: 500 °C (932 °F)
Decomposition Temperature: Not established
VOC Content: 50 % Calculated value
Viscosity, Dynamic: 38 mPa.s @ 25 °C (77 °F)
Bulk Density: Not Established

10. Stability and Reactivity

Hazardous Reactions
Hazardous polymerization does not occur.

Stability
Stable

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

11. Toxicological Information

Toxicity Data for 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt
Acute Oral Toxicity
LD50: 735 mg/kg (Rat, Female)
LD50: 930 mg/kg (Rat, male)
LD50: 1,980 mg/kg (Rat)

Acute dermal toxicity
LD50: > 2,000 mg/kg (rabbit)

Skin Irritation
rabbit, Exposure Time: 2 hrs, Corrosive
Eye Irritation
rabbit, Corrosive

12. Ecological Information

Ecological Data for 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt
Biodegradation
Zahn-Wellens Test, 70 %, Exposure time: 35 Days

Biological Oxygen Demand (BOD)
0 mg/g

Chemical Oxygen Demand (COD)
682 mg/g

Acute and Prolonged Toxicity to Fish
LC50: 122 mg/l (Zebra fish (Brachydanio rerio), 96 hrs)
LC50: > 173 mg/l (Bluegill (Lepomis macrochirus), 96 hrs)
LC50: 25 mg/l (Rainbow trout (Salmo gairdneri), 96 hrs)

Acute Toxicity to Aquatic Invertebrates
EC50: 280 mg/l (Water flea (Daphnia magna), 48 h)

Toxicity to Aquatic Plants
EC50: 26.2 mg/l, (Green algae (Selenastrum capricornutum), 96 h)

Toxicity to Microorganisms
EC0: 500 mg/l, (Pseudomonas putida)

13. Disposal considerations

Waste Disposal Method
Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions
Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

14. Transportation information

Land transport (DOT)
Proper Shipping Name: Caustic alkali liquids, n.o.s. (contains Tolyltriazole, sodium salt)
Hazard Class or Division: 8
UN/NA Number: UN1719
Packaging Group: II
Hazard Label(s): Corrosive

Sea transport (IMDG)
Proper Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S. (contains Tolyltriazole,
**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


When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002). (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:**

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=50%</td>
<td>Water</td>
<td>7732-18-5</td>
</tr>
</tbody>
</table>
<=50% 1H-Benzotriazole, 4(or 5)-methyl-, sodium salt 64665-57-2

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

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<thead>
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<tbody>
<tr>
<td>0.1 - 1%</td>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
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</tbody>
</table>

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.

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**16. Other Information**

**NFPA 704M Rating**

<table>
<thead>
<tr>
<th></th>
<th>0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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**HMIS Rating**

<table>
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<tr>
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<td>1</td>
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<tr>
<td>Physical Hazard</td>
<td>0</td>
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</tbody>
</table>

* = 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: 000000002816
Version Date: 01/11/2007
Report Version: 2.6

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