



PMC WATER SYSTEMS SERVICES INC.

124 CONNIE CRES. UNIT 9 CONCORD, ONTARIO.

TEL 905 669 8262, FAX 905 669 8252, EMAIL pmcwater@aol.com, www.pmcwatersystems.com

MATERIAL SAFETY DATA SHEET

TOLYTRIAZOLE 50%

PMC Water Systems Services Inc.
124 Connie Crescent, Unit 9
Concord, ON L4N 0Y8
Canada

TRANSPORTATION EMERGENCY

CALL CANUTEC: (613) 996-6666

NON-TRANSPORTATION

PMC Information Phone: (800) 668-0946

1. Product and Company Identification

Product Name: Tolytriazole 50%
Material Number: 56240989
Chemical Family: Benzene/toulene derivative
Chemical Name: Tolytriazole, sodium salt, aqueous solution

2. Hazards Identification

Emergency Overview

DANGER! Color: Yellow to amber **Form:** Liquid **Odor:** Characteristic.
Corrosive. Water runoff from fire fighting may be corrosive. Causes respiratory tract burns. Causes skin burns. Causes eye burns. Causes digestive tract burns. Harmful if swallowed.

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

Hazardous Components

Weight %

Components

CAS-No.

<=50%

1H-Benzotriazole, 4(or 5)-methyl-,
sodium salt

64665-57-2

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
	Approximately 13.5 @ 20 °C (68 °F)
Boiling Point/Range:	Approximately 106 °C (222.8 °F)
	108 °C (226.4 °F)
Flash Point:	106 °C (222.8 °F)
Vapor Pressure:	0.04 mmHg @ 20 °C (68 °F)
	Approximately 25 mbar @ 20 °C (68 °F)
Density:	Approximately 1.18 g/cm ³ @ 20 °C (68 °F)
Specific Gravity:	1.19 @ 24 °C (75.2 °F)
Solubility in Water:	Miscible
	Miscible
Autoignition Temperature:	500 °C (932 °F)
	> 500 °C (> 932 °F)
Decomposition Temperature:	Not established
VOC Content:	50 % Calculated value
Viscosity, Dynamic:	38 mPa.s @ 25 °C (77 °F)
	approximately 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 (NO_x), 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, provincial 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,

Hazard Class or Division: sodium salt)
8
UN-No: UN1719
Packaging Group: II
Hazard Label(s): Corrosive

Air transport (ICAO/IATA)

Proper Shipping Name: Caustic alkali liquid, n.o.s. (contains Tolyltriazole, sodium salt)
Hazard Class or Division: 8
UN-No: UN1719
Packaging Group: II
Hazard Label(s): Corrosive

Contact Person: Product Safety Department
Telephone: (800) 668-0946
Version Date: 05/11/2011

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of PMC Water Systems Services Inc. The information in this MSDS relates only to the specific material designated herein. PMC Water Systems Services Inc. assumes no legal responsibility for use of or reliance upon the information in this MSDS.

