

# Safety Data Sheet

# Hazard Information

Hazard information is provided for compliance with both the UK Chemicals (Hazard Information and Packaging) (CHIP) Regulations and the US Hazard Communication Standard (HCS).

# **Chemical and Company Identification**

Product name N,N,N',N'-Tetramethylethylenediamine (TEMED)		Product code				
		GR151-25			For research use	For research use only.
Supplier Hoefer, Inc. 84 October Hill Road, Suite 10 Holliston, MA 01746 Phone: 800-227-4750 508-893-8999						
Emergency Contact ChemTel Inc. 800-255-3924 (North America) 1-300-954-583 (Australia) 000-800-100-4086 (India) 800-099-0731 (Mexico)	+1-813-248-0585 (International) 0-800-591-6042 (Brazil) 400-120-0751 (Peoples Republic of China)					
Composition / Ingredients						
Hazard	C	AS No.	EC No.	%WТ	Molecular Formula	Molecular Weight
N,N,N',N'-Tetramethylethylenediamine	11	10-18-9	203-744-6	~98	$C_6H_{16}N_2$	116.24 g/mol

# **Hazards Identification**

GHS Classification: Flammable liquids (Category 2) Acute toxicity, Oral (Category 3) Acute toxicity, Inhalation (Category 3) Skin corrosion (Category 1B) Serious eye damage (Category 1)

#### Pictograms



#### Signal Word: DANGER

#### Hazard Statements:

H225: Highly flammable liquid and vapor H301 + H331: Toxic if swallowed or if inhaled. H314: Causes severe skin burns and eye damage.

#### **Precautionary Statements:**

**P210:** Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P261: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/ physician.
Potential Health Effects:
Target Organs: Eyes, skin and mucous membranes
Eyes: May cause severe irritation and burns.

**Skin:** May cause skin burns and severe irritation. **Ingestion:** May cause severe irritation to the GI tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May cause pulmonary edema.

CHRONIC HEALTH HAZARDS: May cause dermatitis.

#### **First Aid Measures**

**Eyes:** Flush eyes with water for at least 15 minutes. GET MEDICAL ATTENTION.

**Skin**: Immediately flush are with of soap and water. Remove contaminated clothing. GET MEDICAL ATTENTION.

Inhalation: GET MEDICAL ATTENTION IMMEDIATELY. Remove from exposure to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Ingestion: If swallowed wash out mouth with water if person is conscious. GET MEDICAL ATTENTION. CALL POISON CENTER. Do not induce vomiting.

# Fire-Fighting Measures

General Information: Flammable liquid. Use full protective gear. Combustion generates toxic fumes. Flammable: Yes Flash Point: 17.2°C Autoignition Temperature: N/A Extinguishing Media: Use water spray, foam, dry chemical or carbon dioxide. Explosion Data: Not available.

## Accidental Release Measures

Ventilate the area. Wear appropriate protective equipment. Collect with an electrically protected vacuum cleaner and place in container for disposal according to local regulations

#### Handling and Storage

Handling: Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Storage Conditions: Room temperature. Keep away from ignition sources. Keep in flammable area.

# **Exposure Controls/Personal Protection**

Exposure limits: None listed

Use adequate ventilation. AVOID IGNITION SOURCES. Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation. Personal Protection: Lab coat, safety goggles, rubber gloves Ventilation: Local exhaust systems. Use fume hood. Respiratory protection: Use OSHA/MSHA approved respirator.

# **Physical and Chemical Properties**

Physical State: Liquid Appearance and Odor: Clear, colorless. Amine odor Vapor Density: 4.0 Vapor Pressure: 3 mmHg Viscosity: N/A Freezing/Melting Point: -67°F Boiling Point: 250°F **Decomposition Temperature: N/A** Solubility: Soluble in water Specific Gravity: 0.777

#### Stability and Reactivity

Stability: Stable under normal temperatures and pressure. Conditions to Avoid: IGNITION SOURCES. High temps. Incompatibility: Strong oxidizing and reducing agents Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide Hazardous Polymerization: Has not been reported.

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# **Toxicological Properties**

**Exposure Limits:** 

Toxicity Data: LD<sub>50</sub> / LC<sub>50</sub> Oral, mouse: LD<sub>50</sub> = 630 mg/kg Oral, rat: LD<sub>50</sub> = 268 mg/kg Inhalation, rat: LC<sub>50</sub> = 1318 ppm/4 h Skin, rabbit: LD<sub>50</sub> = 5390 mg/kg

Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: No data available. Neurotoxicity: No data available. Mutagenicity: No data available. Carcinogenicity: Not listed by ACGIH, IARC, NTP or OSHA

#### **Ecological Information**

Toxicity: No information found.

# **Disposal Considerations**

Waste Disposal: Burn in chemical incinerator. Observe all Federal, provincial, and local regulations.

#### Transportation Information

Shipping Information: REGULATED US DOT: SHIPPING NAME: 1, 2-DI-(DIMETHYLAMINO)ETHANE HAZARD CLASS 3, UN NUMBER: UN 2372, PACKING GROUP II

Canada TDG: SHIPPING NAME: FLAMMABLE LIQUID, CORROSIVE NOS (TETRAMETHYETHYLENEDIAMINE, HAZARD CLASS 3(8), UN NUMBER : UN 2924, PACKING GROUP II

#### **Regulatory Information**

US: TSCA: listed

European/International: Hazard Symbol: F C

#### **Risk Phrases:**

R 11: Highly flammable R 20/21: Harmful by inhalation and if swallowed

#### Safety Phrases:

S 16: Keep away from sources of ignition. No smoking. S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection S 45: In case of accident or if you feel unwell, seek medical advice immediately.

Canada: WHMIS: B/2, E

## Additional Information

Hazard Rating System (estimated) NFPA Health Fire Reactivity 3

3 0

This data sheet is based upon information believed to be reliable. The Company makes no statement or warranty as to the accuracy or completeness of the information contained herein which is offered for your consideration, investigation and verification. Any use of the information contained in this data sheet must be determined by the user to be in accordance with appropriate applicable regulations.

