

N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: N,N,N',N'-Tetramethylethylenediamine
Product Code: TMB 075
CAS#: 110-18-9
Synonym: Not available.
Chemical Name: Not available.
Chemical Formula: C₆H₁₆N₂
Formula Weight: 116.20

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:
Name: N,N,N',N'-Tetramethylethylenediamine
Toxicological Data on Ingredients: Not available

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225
Skin corrosion (Sub-category 1B), H314
Serious eye damage (Category 1), H318
Potential Acute Health Effects:
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Potential Chronic Health Effects: Not available
Mutagenic Effects: Not available.
Teratogenic Effects: Not available.
Developmental Toxicity: Not available.
Specific target organ toxicity - Not available.

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact: Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.
Serious Skin Contact: Not available.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation: Not Available.
Ingestion: Do Not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion: Not available.

SECTION 5: FIRE FIGHTING MEASURES



Suitable extinguishing media

Carbon dioxide (CO₂) Foam Dry powder.

Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Risk of dust explosion.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Storage conditions:

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Handle and store under inert gas. Air and moisture sensitive.

Storage class:

Storage class (TRGS 510): 3: Flammable liquids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Respiratory protection

Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	:	Liquid
Odor	:	Not available
Color	:	Clear
Molecular Weight	:	Not available
pH	:	Not available
Boiling Point	:	Not available
Melting Point	:	Not available
Critical Temperature	:	Not available
Specific Gravity	:	Not available
Vapor Pressure	:	Not available
Vapor Density	:	Not available
Volatility	:	Not available
Odor Threshold	:	Not available
Water/Oil Dist. Coeff.	:	Not available
Ionicity (in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Not available

Conditions of Instability: Not available

Incompatibility with various substances: Not available

Special Remarks on Corrosivity: Non-corrosive.

Special Remarks on Reactivity: Not available

Possibility of hazardous reactions: Violent reactions possible with:Oxidizing agents Acids

Hazardous decomposition products: In the event of fire

SECTION 11: TOXICOLOGICAL INFORMATION.

Acute Toxicity:

LD50 Oral - Rat - 268 mg/kg

Remarks: Lungs, Thorax, or Respiration:Other changes.

Gastrointestinal:Ulceration or bleeding from stomach.

Blood: Hemorrhage.

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

LC50 Inhalation - Rat - 4 h - 6,3 mg/l – vapour

Inhalation: Not available

Dermal: Causes skin burns. Classified according to Regulation (EU) 1272/2008.

Routes of Entry: Not available

Toxicity to Animals: Not available

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: Not available.

Special Remarks on Toxicity to Animals: Not available

Special Remarks on other Toxic Effects on Humans: Not available

Reproductive toxicity: Not available

SECTION 12: ECOLOGICAL INFORMATION



Ecotoxicity:

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 240 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - 20,5 mg/l - 72 h
Toxicity to bacteria	static test NOEC - activated sludge - 56,7 mg/l - 28 Days

BOD and COD: Not available

Products of Biodegradation: Not available

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID: 2372 **IMDG:** 2372 **IATA:** 2372

UN proper shipping name

ADR/RID: 1,2-DI-(DIMETHYLAMINO) ETHANE

IMDG: 1,2-DI-(DIMETHYLAMINO) ETHANE

IATA: 1,2-DI-(DIMETHYLAMINO) ETHANE

Transport hazard class (es):

ADR/RID: 3 **IMDG:** 3 **IATA:** 3

Packaging group:

ADR/RID: II **IMDG:** II **IATA:** II

Environmental hazards:

ADR/RID: No **IMDG Marine pollutant:** No **IATA:** No

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements:

- H225 Highly flammable liquid and vapor.
- H301 Toxic if swallowed.
- H301 + H331 Toxic if swallowed or if inhaled.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.

Other Special Considerations: Not available

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