

MATERIAL SAFETY DATA SHEET
N,N,N'-TRIMETHYL-1,3-PROPANEDIAMINE 98%

Section 1 - Chemical Product and Company Identification

MSDS Name:	N,N,N'-TRIMETHYL-1,3-PROPANEDIAMINE 98%
Catalog Numbers:	9.114
Synonyms:	
Company Identification:	Tau-Chem, Ltd. Nobelova 34, P.O. Box 29 836 05 Bratislava, Slovak Republic Phone: +421 2 44 452 252 Fax: +421 2 44 457 645
Relevant identified uses of substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Manufacture of substances
POISON CENTER:	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
Emergency Numbers Slovakia:	Phone: +421 2 54 774 166 Fax: +421 2 54 774 605

Section 2 - Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 3)


Skin corrosion (Category 1B)

Classification according to European Directive 67/548/EEC as amended.

Flammable. Causes burns.

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Label elements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H226	Highly flammable liquid and vapor.
H314	Causes severe skin burns and eye damage.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P280	Wear protective gloves/ protecting 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.

P405	Continue rinsing.
P501	Store locked up.
	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard symbol(s)	
According to European Directive 67/548/EEC as amended	
C	Corrosive.
F	Flammable.
R-phrase(s)	
R10	Flammable.
R34	Causes burns.
S-phrase(s)	
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, glove and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Other hazards	None.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
4543-96-8	N,N,N'-TRIMETHYL-1,3-PROPANEDIAMINE	98	224-901-5

Classification Flam Liq. 3; Skin Corr. 1B
H226,H314
C; R10 - 34

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 – First Aid Measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled:	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 – Fire Fighting Measures

Suitable extinguishing media:	Carbon dioxide (CO ₂), dry powder. Water may be ineffective but may be used for cooling exposed containers.
Special protective equipment for fire-fighters:	Wear self contained apparatus breathing apparatus for fire fighting if necessary.

Section 6 – Accidental Release Measures

Personal precautions:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe area.
Environmental precautions:	Prevent further leakage or spillage if safe to do. Do not let product enter drains.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and dispose of as a hazardous waste. Keep in suitable container for disposal according to local regulations.

Section 7 – Handling and Storage

Precautions for safe handling:	Avoid inhalation of vapor or mist. Keep away from sources of ignition. – No smoking. Take measures to prevent to built up of electrostatic charge.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8 – Exposure Controls, Personal Protection

Personal protective equipment:	
Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection	The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.
Eye protection:	Face shield and safety glasses.
Skin and body protection:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 – Physical and Chemical Properties

Appearance

Form:	Liquid
Colour:	Colourless

Safety data:

pH	Not available	
Melting Point:	Not available	
Boiling Point:	140 - 142 °C / 760 mm Hg	
Flash Point:	34 °C – closed cup	Pungent
Ignition temperature:	Not available	
Explosion Limits: Lower:	Not available	
Explosion Limits: Upper:	Not available	
Solubility in water:	Not available	
Density:	0.790 g/cm ³	
Refractive index:	1.4280 – 1.4300	
Molecular Formula:	C ₆ H ₁₆ N ₂	
Molecular Weight:	116.21 g/mol	

Section 10 – Stability and Reactivity

Chemical Stability:	Stabile under recommended storage conditions.
Conditions to Avoid:	Heat, flames and sparks.
Materials to avoid:	Strong acids, Strong oxidizing agents.
Hazardous Decomposition Products	Hazardous decomposition products under fire conditions. – Carbon oxides, Nitrogen oxides.

Section 11 – Toxicological Information

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	May cause allergic respiratory reaction.
Germ cell mutagenicity	No data available
Carcinogenicity:	IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	No data available
Specific target organ toxicity – single exposure	Inhalation – May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	May be harmful if swallowed. Causes burns.
Skin	May be harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Data not available.

Section 12 – Ecological Information

Toxicity:	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	No data available
Other adverse effects	No data available

Section 13 – Disposal Considerations

Product	This material may be burned in a chemical incinerator equipped with an afterburner and a scrubber. Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging	Dispose of as unused product.

Section 14 – Transport Information

	IATA	IMDG	RID/ADR
Shipping Name:	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.	AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.
Hazard Class:	8 (3)	8 (3)	8 (3)
UN Number:	2734	2734	2734
Packing Group:	II	II	II
		EMS No: F-E; S-C Marine pollutant: No	

Section 15 – Regulatory Information

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

Section 16 – Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Flam. Liq.	Flammable liquids.
H226	Flammable liquid and vapor.
H314	Causes severe skin burns and eye damage.
Skin Corr.	Skin corrosion.
C	Corrosive.
R10	Flammable.
R34	Causes burns.

MSDS Creation Date: 28/11/2007

Revision #1 Date: 25/11/2010

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

Disclaimer:

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.