

MATERIAL SAFETY DATA SHEET
1,2,5,6-DIEPOXYHEXANE 97%

Section 1 - Chemical Product and Company Identification

MSDS Name:	1,2,5,6-DIEPOXYHEXANE 97%
Catalog Numbers:	1.15
Synonyms:	
Relevant identified uses of substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Manufacture of substances
Company Identification:	Tau-Chem, Ltd. Nobelova 34, P.O. Box 29 836 05 Bratislava, Slovak Republic Phone: +421 2 44 452 252 Fax: +421 244 457 645
POISON CENTER:	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
Emergency Numbers Slovakia:	Phone: +42 2 54 774 166 Fax: +42 2 54 774 605

Section 2 - Hazards Identification

Classification of the substance or mixture

According to Regulation (EC) No 1272/2008

Acute toxicity, Dermal (Category 3)

Acute toxicity, Oral (Category 4)


Germ cell mutagenicity (Category 2)

Carcinogenicity (Category 1B)

According to European Directive 67/548/EEC as amended.

May cause cancer. Possible risk of irreversible effects. Harmful if swallowed. Toxic in contact with skin.

Label elements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H302	Harmful if swallowed.
H312	Harmful in <u>contact with skin</u>
H341	Suspected of causing genetic defects.
H350	May cause cancer.
Precautionary statement(s)	
P280	Wear protective gloves/protective clothing.
P201	Obtain special instructions before use.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P405	Store locked up.
Hazard symbol(s)	
T	Toxic.
R-phrase(s)	
R45	May cause cancer.
R46	May cause heritable genetic damage.
R22	Also harmful if swallowed.
R24	Also toxic in contact with skin.
S-phrase(s)	
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S45	In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible)
S53	Avoid exposure – obtain special instructions before use.
Restricted to professional users.	

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
1888-89-7	1,2,5,6-DIEPOXYHEXANE	97	217-564-0

Classification Acute Tox. 3; Acute Tox. 4; Muta. 2; Carc. 1B; H302, H313, H341, H350; T, R45 R46-R22-R24

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	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or
1.15	2 1,2,5,6-Diepoxyhexane

extinguishing media:	carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Special protective equipment for fire-fighters:	Wear self contained apparatus breathing apparatus for fire fighting if necessary.
Further information:	Use water spray to cool unopened containers.

Section 6 - Accidental Release Measures

Personal precautions:	Avoid breathing vapors, mist or gas. Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe area.
Environmental precautions::	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up	Contain spillage, and then collect with absorbent material, and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Precautions for safe handling:	Avoid exposure – obtain special instructions before use. Avoid inhalation or vapor or mist. Normal measures for preventive fire protection.
Conditions for safe storage:	Store in cool place. 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: Clear liquid
Color: colorless

Safety data:

pH Not available
Boiling Point: 62 °C / 300 Pa - lit.
Melting Point: Not available
Flash Point: 97 °C closed cup
Ignition temperature: Not available
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Solubility in water: Not available
Density: 0.980 g/cm³ at 25°C
Refractive Index: 1.445
Molecular Formula: C₆H₁₀O₂
Molecular Weight: 114.14 g/mol

Section 10 - Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.
Conditions to Avoid: No data available.
Materials to avoid: Strong oxidizing agents, acids, Bases.
Hazardous Decomposition Products: Hazardous decomposition products under fire conditions.
– Carbon oxides.

Section 11 - Toxicological Information

Acute toxicity LD50 Oral – No data available
LD50 Dermal – No data available
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available
Carcinogenicity: Possible human carcinogen.

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 No data available
Specific target organ toxicity – repeated exposure No data available
Aspiration hazard No data available

Potential health effect:

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	Toxic if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation

Signs and Symptoms of Exposure

Skin contact may provoke the following symptoms: irritation, skin contact poisoning. Contact with eyes can cause: Eye irritation. Inhalation of vapors can cause: Local irritation.

Additional Information

RTECS: MO1575000

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	Material may be burned in a chemical incinerator equipped with an afterburner and 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	IMGD	RID/ADR
Shipping Name:	TOXIC LIQUID, ORGANIC, N.O.S. (1,2,5,6-Diepoxyhexane)	TOXIC LIQUID, ORGANIC, N.O.S. (1,2,5,6-Diepoxyhexane)	TOXIC LIQUID, ORGANIC, N.O.S. (1,2,5,6-Diepoxyhexane)
Hazard Class:	6.1	6.1	6.1
UN Number:	2810	2810	2810
Packing Group:	III	III	III

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) nad R-phrase(s) mentioned in Section 3

Acute Tox.	Acute toxicity.
Carc.	Carcinogenicity.
Muta	Germ cell mutagenicity.
H302	Harmful if swallowed.
H311	Toxic in contact with skin
H341	Suspected of causing genetic defects.
H350	May cause cancer.
T	Toxic.
R22	Also harmful if swallowed.
R24	Also toxic in contact with skin.
R45	May cause cancer.
R46	May cause heritable genetic damage.

MSDS Creation Date: 23/4/2007

Revision #1 Date 11/06/2010

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.