

SAFETY DATA SHEET  
1,2-EPOXYHEXANE 98%

## Section 1 - Chemical Product and Company Identification

## 1.1 Product identifiers

Product name: 1,2-EPOXYHEXANE 98%  
CAS-No. 1003-14-1  
EINECS-No. 213-701-3  
Catalog Numbers: 1.25  
**Synonyms:** Propyloxirane

## 1.2 Relevant identified uses of substance or mixture and uses advised against

Identified uses Laboratory chemicals, Manufacture of substances

## 1.3 Details of the supplier of the safety data sheet

Company: TAU-CHEM, Ltd.  
Nobelova 34, P.O. Box 29  
836 05 Bratislava, Slovak Republic  
Telephone +421 2 44 452 252  
Fax +421 2 44 457 645

**POISON CENTER:** National Toxicological Information Centre  
Limbová 5, 833 05 Bratislava,

**1.4 Emergency telephone:** +421 2 54 774 166

## Section 2 - Hazards Identification

## 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Flammable liquids (Category 2)  
Acute toxicity (Category 4)  
Eye irritation (Category 2)  
Skin Irritation (Category 2)  
Specific target organ – single exposure (Category 3)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC****According to European Directive 67/548/EEC as amended.**

Highly flammable. Harmful if swallowed. Irritating to eyes, respiratory system and skin.

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

## 2.2 Label elements

Pictogram



Signal word

Danger

Hazard statement(s)

H225	Highly flammable liquid and vapor.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P241	Use <b>explosion</b> -proof electrical/ <b>ventilating</b> /lighting/equipment.
P303+P361+P353	IF ON <b>SKIN</b> (or hair): Remove/Take off immediately all contaminated clothing. Rinse <b>skin</b> with water/shower.
P403+P235	Store in a <b>well-ventilated</b> place. Keep cool.
P501	Dispose of contents/container to in accordance with local/regional/national/international regulation.

Hazard symbol(s)

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



Hazard symbol(s)

F Flammable.

R-phrases(s)

R11 Highly flammable.

S-phrases(s)

S16 Keep away from sources of ignition – No smoking.

S26 In case of contact with eyes rinse immediately with plenty of water and seek for medical advice.

**2.3 Other hazards** None.

### Section 3 - Composition, Information on Ingredients

#### 3.1 Substances

CAS#	Chemical Name:	%	EINECS#
1003-14-1	1,2-EPOXYPENTANE	98	213-701-3
<b>Synonyms</b>	Propyloxirane		
<b>Formula</b>	C <sub>5</sub> H <sub>10</sub> O		
<b>Molecular weight</b>	86.13 g/mol		

### Section 4 - First Aid Measures

#### 4.1 Description of 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.

#### **4.2 Most important symptoms and effects, both acute and delayed**

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

#### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## **Section 5 - Firefighting Measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media:**

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or 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.

### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides.

### **5.3 Advice for firefighters**

Wear self-contained apparatus breathing apparatus for firefighting if necessary.

### **5.4 Further information**

Cool all affected containers with flooding quantities of water.

## **Section 6 - Accidental Release Measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so.

Do not let product enter drains

### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### **6.4 Reference to other sections**

For disposal see section 13.

## **Section 7 - Handling and Storage**

### **7.1 Precautions for safe handling:**

Avoid contact with skin and eyes. Avoid inhalation or vapor or mist. Keep away from sources of ignition – No smoking. Take measures to prevent build up of electrostatic charge.

### **7.2 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.

### 7.3 Specific end uses

No data available

## Section 8 - Exposure Controls, Personal Protection

### 8.1 Control parameters

#### Component with workplace control parameters

### 8.2 Exposure controls

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Appropriate engineering controls

General industrial hygiene practice

#### Personal protective equipment

##### Eyeface protection

Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate

##### Skin and 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. 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

##### Respiratory protection

Where protection from nuisance levels of dust are desired, use type N95 (US) 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

### 9.1 Information on basic physical and chemical properties

- |                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| a) Appearance                                     | Form: Liquid<br>Colour: colourless |
| b) Odour                                          | No data available                  |
| c) Odour Threshold                                | No data available                  |
| d) pH                                             | No data available                  |
| e) Melting point/freezing point                   | No data available                  |
| f) Initial boiling point and boiling point range: | 89-90 °C at 1.000hPa– lit.         |
| g) Flash Point:                                   | -12 °C closed cup                  |
| h) Evaporation rate                               | No data available                  |
| i) Flammability (solid, gas)                      | No data available                  |
| j) Upper/lower flammability                       |                                    |

or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	0.83 g/cm <sup>3</sup> at 25 °C
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosives properties	No data available
t) Oxidizing properties	No data available

## 9.2 Other safety information

No data available

## Section 10 - Stability and Reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

No data available

### 10.3 Possibility of hazardous reaction

No data available

### 10.4 Conditions to Avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous Decomposition Products

Other decomposition products – no data available

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

**Acute toxicity** 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:

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.

<b>Specific target organ toxicity – repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>Potential health effect:</b>	
<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation
<b>Signs and Symptoms of Exposure</b>	
	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
<b>Additional Information</b>	
	RTECS: SA2700000

## Section 12 – Ecological Information

<b>12.1 Toxicity</b>	No data available
<b>12.2 Persistence and degradability</b>	No data available
<b>12.3 Bioaccumulative potential</b>	No data available
<b>12.4 Mobility in soil</b>	No data available
<b>12.5 PBT and vPvB assessment</b>	No data available
<b>12.6 Other adverse effects</b>	No data available

## Section 13 - Disposal Considerations

<b>13.1 Waste treatment methods</b>	
<b>Product</b>	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated packaging</b>	Dispose of as unused product.

## Section 14 - Transport Information

<b>14.1 UN number</b>			
	ADR/RID: 1993	IMDG: 1993	IATA: 1993
<b>14.2 UN proper shipping name</b>			
	ADR/RID: FLAMMABLE LIQUID, N.O.S.		
	IMDG: FLAMMABLE LIQUID, N.O.S.		
	IATA: FLAMMABLE LIQUID, N.O.S.		
<b>14.3 Transport hazard class(es)</b>			
	ADR/RID: 3	IMDG: 3	IATA: 3

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: -

IMDG: -

IATA: -

**14.6 Special precautions for user**

No data available

**Section 15 - Regulatory Information**

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

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

No data available

**15.6 Chemical Safety Assessment**

No data available

**Section 16 - Other Information****SDS version:** 3**Revision date:** 21/02/2012**Further information**

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.