

**MATERIAL SAFETY DATA SHEET**  
**1,2-EPOXYCYCLODODECANE 98%**

**Section 1 - Chemical Product and Company Identification**

**MSDS Name:** 1,2-EPOXYCYCLODODECANE 98%  
**Catalog Numbers:** 1.18  
**Synonyms:** Cyclododecene oxide  
 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 2 44 457 645

**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**

Skin irritation (Category 2)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Irritating to skin.

**Label elements**

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

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation

Precautionary statement(s)

None

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

Hazard symbol(s)



Xi

Irritant.

R-phrases)

R38

Irritating to skin.

S-phrases)



**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. Moisture sensitive.

## 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:** Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards as NIOSH (US) or EN 166 (EU)

**Skin and body protection:** Impervious 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:** Viscous liquid  
**Colour:** Light brown

**Safety data:**

**pH** Not available  
**Melting point:** -7 °C  
**Boiling Point:** 274 - 276 °C - lit.  
**Flash Point:** 113 °C - closed cup  
**Ignition temperature:** Not available  
**Explosion Limits: Lower:** Not available  
**Explosion Limits: Upper:** Not available  
**Vapour pressure:** 0,0100 hPa at 20 °C  
**Solubility in water:** insoluble  
**Relative density:** 0,947 g/mL at 20 °C  
**Refractive Index:** Not available  
**Molecular Formula:** C<sub>12</sub>H<sub>22</sub>O  
**Molecular Weight:** 182.3 g/mol

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under recommended storage conditions.

|  |   |
|--|---|
| <b>Conditions to avoid:</b>              | Moisture.   |
| <b>Materials to avoid:</b>               | Acids, Bases, Oxidizing agents  |
| <b>Hazardous Decomposition Products:</b> | Hazardous decomposition products under fire conditions.<br>– Carbon oxides. |

## Section 11 - Toxicological Information

|  |                                 |
|--|---------------------------------|
| <b>Acute toxicity</b>                    | LD50 Oral - rat - > 5.000 mg/kg |
| <b>Skin corrosion/irritation</b>         | No data available               |
| <b>Serious eye damage/eye irritation</b> | No data available               |
| <b>Respiratory or skin sensitization</b> | No data available               |
| <b>Germ cell mutagenicity</b>            | 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.

|   |   |
|---|---|
| <b>Reproductive toxicity:</b>                             | No data available   |
| <b>Specific target organ toxicity – single exposure</b>   | 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.<br>Causes respiratory tract irritation.  |
| <b>Ingestion</b>  | May be harmful if swallowed.  |
| <b>Skin</b>   | May be harmful if absorbed through skin.<br>Causes skin irritation. |
| <b>Eyes</b>   | Causes eye irritation   |

### **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

|                                      |   |
|--------------------------------------|---|
| <b>Toxicity:</b>                     | Toxicity to fish<br>LC50 - Leuciscus idus (Golden orfe) - 4,8 mg/l - 48 h |
| <b>Persistence and degradability</b> | No data available   |
| <b>Bioaccumulative potential</b>     | No data available   |
| <b>Mobility in soil</b>              | No data available   |
| <b>PBT and vPvB assessment</b>       | No data available   |
| <b>Other adverse effects</b>         | No data available   |

### Section 13 - Disposal Considerations

**Product** 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             |
|-----------------------|---------------------|---------------------|---------------------|
| <b>Shipping Name:</b> | Not dangerous goods | Not dangerous goods | Not dangerous goods |
| <b>Hazard Class:</b>  |                     |                     |                     |
| <b>UN Number:</b>     |                     |                     |                     |
| <b>Packing Group:</b> |                     |                     |                     |

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

|             |                        |
|-------------|------------------------|
| Skin Irrit. | Skin Irritation.       |
| H315        | Causes skin irritation |
| Xi          | Irritant.              |
| R36         | Irritating to skin.    |

**MSDS Creation Date:** 22/07/2011

**Revision #0:** Original

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.