

SAFETY DATA SHEET  
N-PROPYL ETHER 99%**Section 1 - Chemical Product and Company Identification****1.1 Product identifiers**

Product name: N-PROPYL ETHER 99%  
CAS-No. 111-43-3  
EINECS-No. 203-869-6  
Index-No. 603-045-00-X  
Catalog Numbers: 99.22  
**Synonyms:** Di-n-propyl ether, Dipropyl oxide, Propylether

**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)

Specific target organ toxicity – single exposure (Category 3)

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

Highly flammable. May form explosive peroxides. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

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

Pictogram



Signal word

Danger

Hazard statement(s)

99.22

H225 Highly flammable liquid and vapor.  
H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/ hot surfaces. – No smoking.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Supplemental Hazard information (EU)  
EUH019 May form explosive peroxides.  
EUH066 Repeated exposure may cause skin dryness or cracking.

Hazard symbol(s)

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



Hazard symbol(s)

F Highly flammable.

R-phrase(s)

R11 Highly flammable.  
R19 May form explosive peroxides.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

S-phrase(s)

S9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition – No smoking.  
S29 Do not empty into drains.  
S33 Take precautionary measures against static discharges.

**2.3 Other hazards**

None.

### Section 3 - Composition, Information on Ingredients

#### 3.1 Substances

CAS#	Chemical Name:	%	EINECS#
111-43-3 Index-No.	N-PROPYL ETHER 603-045-00-X	99	203-869-6

<b>Formula</b>	C <sub>6</sub> H <sub>14</sub> O
<b>Molecular weight</b>	102.17 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 after 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

Use water spray to cool unopened container.

## 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 inhalation or vapor or mist. Keep away from sources of ignition – No smoking. Take measures to prevent build up of electrostatic charge.

Use spark-proof tools and explosion proof equipment.

### 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

#### Appropriate engineering controls

General industrial hygiene practice

#### Personal protective equipment

##### Eye/face 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 | - 123 °C                           |

f) Initial boiling point and boiling point range:	88 – 90 °C / 760 mm Hg
g) Flash Point:	- 28 °C closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	9.50 vol % 1.20 vol %
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	0.736 g/cm <sup>3</sup> at 25 °C
n) Water solubility	3 g/L (20 °C)
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	215 °C
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, strong acids.

### 10.6 Hazardous Decomposition Products

Other decomposition products – no data available

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

#### Acute toxicity

LC50 Inhalation - mouse - 15 h - 163.000 mg/m<sup>3</sup>

Remarks: Behavioral: General anesthetic.

LD50 Intravenous - mouse - 204 mg/kg

#### 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.

**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. Vapours may cause drowsiness and dizziness.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

**Eyes** May cause 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: UJ5125000

## Section 12 – Ecological Information

**12.1 Toxicity** No data available

**12.2 Persistence and degradability** No data available

**12.3 Bioaccumulative potential** No data available

**12.4 Mobility in soil** No data available

**12.5 PBT and vPvB assessment** No data available

**12.6 Other adverse effects** No data available

## Section 13 - Disposal Considerations

**13.1 Waste treatment methods**

**Product** 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.

**Contaminated packaging** Dispose of as unused product.

## Section 14 - Transport Information

**14.1 UN number**

ADR/RID: 2384

IMDG: 2384

IATA: 2384

**14.2 UN proper shipping name**

ADR/RID: DI-n-PROPYL ETHER

IMDG: DIPROPYL ETHER

IATA: Di-n-propyl ether

**14.3 Transport hazard class**

ADR/RID: 3

IMDG: 3

IATA: 3

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: no

IMDG: Marine pollutant: no

IATA: no

**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: 2****Revision Date: 17/01/2012****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.