

 <p><b>CHEMLABS</b> Quality Our Forte</p>	<p><b>LEONID CHEMICALS PVT. LTD., BANGALORE</b></p> <p>An ISO-9001:2008 Certified Company</p> <p><b>Quality Assurance Department</b></p>	<p>(CODE) DOCUMENT : WI (CODE) SECTION : WI/SM (DATE) : 01.04.2011</p>	 <p>Issue : 02 Rev.: 00</p>
<p>Title: MATERIAL SAFETY DATA SHEET (MSDS): 1-HEXANOL</p>			<p>1   Page of 1</p>

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:**

1-Hexanol

**Cat No:**

H045

**Synonyms:**

Hexyl alcohol

**Company Information:**

LEONID CHEMICALS Pvt Ltd,  
62/A2, 1st Stage,  
Yeshvanthpur Industrial Suburb,  
Ashokpuram School Road,  
Bangalore -22, Karnataka, INDIA  
Ph- +91-80-23378354  
Fax: +918023378354/23377126

## 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

According to Regulation (EC) No1272/2008

Acute toxicity (Category 4)

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

Harmful if swallowed.

**Label elements**

Pictogram

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

Precautionary statement(s) none

Hazard symbol(s)

Xn Harmful

R-phrase(s)

R22 Harmful if swallowed.

S-phrase(s)

S24/25 Avoid contact with skin and eyes.

Other hazards - none

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C<sub>6</sub>H<sub>14</sub>O

Molecular Weight: 102.17 g/mol

CAS-No.: 111-27-3

EC-No.: 203-852-3

Acute Tox. 4; H302

Xn, R22

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

### 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 of 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.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

#### Environmental precautions

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Do not let product enter drains.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**Conditions for safe storage**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance**

Form: clear, liquid

Colour colourless

pH: no data available

Melting point: -52 °C - lit.

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Boiling point: 156 - 157 °C - lit.  
Flash point: 59 °C - closed cup  
Ignition temperature: 293 °C  
Lower explosion limit: 1.3 %(V)  
Vapour pressure: 1.00 hPa at 20 °C  
1 hPa at 25.6 °C  
Density: 0.814 g/cm<sup>3</sup> at 25 °C  
Water solubility: no data available  
Partition coefficient: n-octanol/waterlog Pow: 1,82  
Relative vapour density: 3.53- (Air = 1.0)

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Strong oxidizing agents, Strong acids

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 720 mg/kg

Remarks: Liver: Fatty liver degeneration. Kidney, Ureter, Bladder: Other changes. Blood: Other changes.

### Skin corrosion/irritation

Skin - rabbit - Mild skin irritation

### Serious eye damage/eye irritation

Eyes - rabbit - Mild eye irritation

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

Genotoxicity in vitro - Not mutagenic in Ames Test.

Histidine reversion (Ames)

### Carcinogenicity

IARC: No component of this product present 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

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no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure**

Dermatitis, Nausea, Dizziness, Headache, narcosis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: MQ4025000

## 12. ECOLOGICAL INFORMATION

**Toxicity**

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 97.7 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates.

EC50 - Daphnia magna (Water flea) - > 100 mg/l - 24 h

**Persistence and degradability**

Biodegradability

**Bioaccumulative potential**

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 24 h

Bioconcentration factor (BCF): 0.5

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

## 13. DISPOSAL CONSIDERATIONS

**Product**

This combustible 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.

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#### 14. TRANSPORT INFORMATION

##### ADR/RID

UN-Number: 2282 Class: 3 Packing group: III

Proper shipping name: HEXANOLS

##### IMDG

UN-Number: 2282 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: HEXANOLS

Marine pollutant: No

##### IATA

UN-Number: 2282 Class: 3 Packing group: III

Proper shipping name: Hexanols

#### 15. REGULATORY INFORMATION

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

#### 16. OTHER INFORMATION

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

Acute Tox. Acute toxicity

H302 Harmful if swallowed.

Xn Harmful

R22 Harmful if swallowed.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.

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### Specification manual – Hexan-1-ol

**C<sub>6</sub>H<sub>14</sub>O**

**MW: 102.18**

**Product** : Hexan-1-ol  
**Description** : Clear colourless liquid  
**Cat No** : H045  
**Cas No** : 111-27-3  
**Prepared Date** : 22.12.2011  
**Approved Date** : 22.12.2011

REVISION HISTORY			
Issue/Rev	Description of Change	Author	Effective Date
01/00	Initial Release	S. Paul Joshua	22.12.2011
02/00	Reviewed no changes	S. Paul Joshua	NA
Next Review Due :	02.04.2015		
To be reviewed by :	Head-QC/QA		

Sl.no.	Tests	Limits
1	Density	0.814 g/mL
2	Assay (GC)	≥ 99.0 %
3	Boiling range	156°C-157°C

Approved By: S.Paul Joshua, Head Quality Control and Quality Assurance