

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifiers

Product name: Acetone
Product Number: A001, A002, A111, A394, A997, A999
Brand: CHEMLABS
CAS-No: 67-64-1

1.2 Relevant identified uses of the 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: Leonid Chemicals Pvt Ltd
Plot No: 30P2, KIADB Industrial Area,
Dobaspet,
Taluk: Nelamangala.
District Bangalore Rural - 562 111
Karnataka, India
Tel. /Fax Nos. +9180 27735288/ +91 80 27735289

1.4 Emergency telephone number

Emergency Phone #: +9180 27735288/ +91 80 27735289

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225

Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H335

For the full text of the H-Statements mentioned in this section, see section 16.0.

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

F	Highly flammable	R11
Xi	Irritant	R36
		R66
		R67

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

LEONID CHEMICALS PVT. LTD.

An ISO 9001 : 2008 Certified Co.

62/A2, 1st Stage, Yeshwanthpur Indl. Suburb, Ashokpuram School Road,
Bangalore - 560 022, Karnataka, INDIA. Telefax : +91 80 23378354 / 23377126
Email : leonid@leonidchemicals.net ; Website : www.leonidchemicals.com

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing vapours.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula: C₃H₆O
Molecular Weight: 58.08 g/mol
CAS-No. 67-64-1
EC-No. 200-622-2
Index-No. 606-001-00-8
Registration number 01-2119471330-49-XXXX

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Acetone			
CAS – No.	67-64-1	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336, EUH066	<= 100 %
EC – No.	200-662-2		
Index-No.	606-001-00-8		
Registration number	01-2119471330-49-XXXX		

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Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
Acetone			
CAS – No.	67-64-1	F, Xi, R11 - R36 - R66 - R67	<= 100 %
EC – No.	200-662-2		
Index-No.	606-001-00-8		
Registration number	01-2119471330-49-XXXX		

For the full text of the H-Statements and R-Phrased mentioned in this section, see Section 16

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 of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician..

If swallowed

Do NOT induce vomiting. 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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

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. For personal protection see section 8.

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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

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.

Storage class (TRGS 510): Flammable liquids

7.3 Specific end uses: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Derived no effect level (DNEL)

Application area	Exposure routes	Health effect	Value
Workers	Skin contact	Long-term systemic effects	186mg/kg BW/d
Consumers	Ingestion	Long-term systemic effects	62mg/kg BW/d
Consumers	Skin contact	Long-term systemic effects	62mg/kg BW/d
Workers	Inhalation	Acute systemic effects	2420 mg/m ³
Workers	Inhalation	Long-term systemic effects	2120 mg/m ³
Consumers	Inhalation	Long-term systemic effects	200 mg/m ³

Predicted no effect concentration (PNEC)

Compartment	Value
Soil	33.3 mg/kg
Marine water	1.06 mg/l
Fresh water	10.6 mg/l
Marine water sediment	3.04 mg/kg
Fresh water sediment	30.4 mg/kg
Onsite sewage treatment plant	100 mg/l

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses .Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Splash contact

Material: Butyl rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Material tested: Butoject

Splash contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Material tested:Butojec

If used in solution, or mixed with other substances and under conditions which differ from EN 374, Contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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Body Protection

Impervious clothing. Flame retardant antistatic protective clothing., 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 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).

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form:	Clear colourless liquid.
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	Melting point/range: -94.0 °C - lit.
f) Initial boiling point and boiling range	56.0°C at 1.013 hPa - lit
g) Flash point	-16.99 °C - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 13 %(V) Lower explosion limit: 2.0 %(V)
k) Vapour pressure	533.3 hPa at 39.5 °C 245.3 hPa at 20 °C
l) Vapour density	No data available
m) Relative density	0.791 g/cm ³ at 25 °C
n) Water solubility	completely miscible
o) Partition coefficient: octanol/water	og Pow: -0.24
p) Auto-ignition temperature	465.0°C
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information:

Surface tension	23,2 mN/m at 20,0 °C
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10. STABILITY AND REACTIVITY

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- 10.1 Reactivity:** no data available
- 10.2 Chemical stability:**
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions:** No data available.
- 10.4 Conditions to avoid:** Heat, flames and sparks.
- 10.5 Incompatible materials**
Bases, Oxidizing agents, Reducing agents, Acetone reacts violently with phosphorous oxychloride.
- 10.6 Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

LD50 Oral - Rat – 5.800 mg/kg

Remarks: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Tremor.
Behavioral: Headache. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

LC50 Inhalation - Rat - 8 h - 50.100 mg/m³

Remarks: Drowsiness Dizziness Unconsciousness

LD50 Dermal - Guinea pig - 7.426 mg/kg

Skin corrosion/irritation:

Skin - Rabbit

Result: Mild skin irritation – 24 h

Serious eye damage/eye irritation:

Skin - Rabbit

Result: Mild skin irritation - 24 h

Respiratory or skin sensitization:

Guinea pig

Result: Does not cause skin sensitisation

Germ cell mutagenicity: No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

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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:
May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: No data available

Additional Information:
RTECS: AL3150000

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

Kidney - Irregularities - Based on Human Evidence
Skin - Dermatitis - Based on Human Evidence

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity:**
Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 5.540 mg/l - 96 h
Toxicity to daphnia and LC50 - Daphnia magna (Water flea) - 8.800 mg/l - 48 h
other aquatic invertebrates
Toxicity to algae Remarks: No data available
- 12.2 Persistence and degradability:**
Biodegradability Result: 91 % - Readily biodegradable (OECD Test Guideline 301B)
- 12.3 Bioaccumulative potential:** Does not bioaccumulate.
- 12.4 Mobility in soil:** No data available
- 12.5 Results of PBT and vPvB assessment:**
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
- 12.6 Other adverse effects:** No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

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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.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1	UN number: ADR/RID: 1090	IMDG: 1090	IATA: 1090
14.2	UN proper shipping name ADR/RID: ACETONE IMDG: ACETONE IATA: Acetone		
14.3	Transport hazard class(es): ADR/RID: 3	IMDG: 3	IATA: 3
14.3	Packaging group: ADR/RID: II	IMDG: II	IATA: II
14.4	Environmental hazards: ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.5	Special precautions for user: No data available		

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**
Authorisations and/or restrictions on use
No data available
- 15.2 **Chemical Safety Assessment:**
A Chemical Safety Assessment has been carried out for this substance.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness
STOT SE	Specific target organ toxicity - single exposure.

Full text of R-phrases referred to under sections 2 and 3

F	Highly flammable
Xi	Irritant
R11	Highly flammable.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.



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R67

Vapours may cause drowsiness and dizziness

Further information

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, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.

