

 <p>CHEMLABS Quality Our Forte</p>	<p>LEONID CHEMICALS PVT. LTD., BANGALORE</p> <p>An ISO-9001:2008 Certified Company</p> <p>Quality Assurance Department</p>	<p>(CODE) DOCUMENT : WI (CODE) SECTION : WI/SM (DATE) : 01.04.2010</p>	 <p>Issue : 02 Rev.: 00</p>
<p>Title: MATERIAL SAFETY DATA SHEET (MSDS):ALLYL ALCOHOL LR</p>			<p>1 Page of 1</p>

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SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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MSDS Name: Allyl alcohol LR

Catalog Numbers: A039

Synonyms: 2-Propen-1-ol

Cas Numbers : 107-18-6

Company Information:

LEONID CHEMICALS Pvt Ltd,
62/A2, 1st Stage,
Yeshwanthpur Industrial Suburb,
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Ph- +91-80-23378354
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Email: lab@leonidchemicals.net

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SECTION 2. HAZARDS IDENTIFICATION

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Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids (Category 2)

Acute toxicity, Inhalation (Category 3)

Acute toxicity, Dermal (Category 3)

Acute toxicity, Oral (Category 3)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Skin irritation (Category 2)

Acute aquatic toxicity (Category 1)

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

Very toxic to aquatic organisms. Flammable. Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Hazard statement(s)

H225 Highly flammable liquid and vapour.

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H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
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 HazardStatements :None

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

Hazard symbol(s)

R-phrase(s)

R10 Flammable.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R50 Very toxic to aquatic organisms.

S-phrase(s)



S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Other hazards

Photosensitizer., Lachrymator.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

SYNONYMS : 2-PROPEN-1-OL
FORMULA : C3H6O
MOLECULAR WEIGHT : 58,08 G/MOL
CAS-No. : 107-18-6
EC-No. : 203-470-7
Index-No : 603-015-00-6

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SECTION 4. FIRST AID MEASURES

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. Take victim immediately to hospital. 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.

Most important symptoms and effects, both acute and delayed

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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Wear respiratory protection. Avoid breathing vapors, 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.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

SECTION 7. HANDLING AND STORAGE

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 build up of electrostatic charge.

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. Handle and store under inert gas.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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.

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Body Protection

Complete suit protecting against chemicals, 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).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical property

Appearance Form	: liquid
Colour	: colourless
Odour	: no data available
pH	:no data available
Melting point/range	: -129 °C - lit.
Initial boiling range	: 96 - 98 °C - lit.
Flash point	: 22 °C - closed cup
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	:18 %(V)
Lower explosion limit	: 2,5 %(V)
Vapour pressure	: 183 hPa at 55 °C 31,7 hPa at 25 °C
Vapour density	: 2,01 - (Air = 1.0)
Relative density	: 0,854 g/cm ³ at 25 °C
Water solubility	: no data available
Partition coefficient	: no data available
Autoignition temperature	:no data available
Decomposition temperature	: no data available
Viscosity	: no data available
Explosive properties	:no data available
Oxidizing properties	: no data available

SECTION 10. STABILITY AND REACTIVITY

Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

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

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Incompatible materials
Alkali metals, Oxidizing agents

Hazardous decomposition products
Other decomposition products - no data available

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SECTION 11. TOXICOLOGICAL INFORMATION
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Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 64 mg/kg
LC50 Inhalation - rat - 8 h - 76 ppm
Remarks: Lungs, Thorax, or Respiration: Acute pulmonary edema.
LD50 Dermal - rabbit - 45 mg/kg

Skin corrosion/irritation

Skin - rabbit - Open irritation test - 24 h

Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation

Respiratory or skin sensitization

Buehler Test - guinea pig - Causes sensitization.

Germ cell mutagenicity

Genotoxicity in vitro - Hamster - Lungs
Mutation in mammalian somatic cells.

Carcinogenicity

This product is or contains a component that is probably not carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
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

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation Toxic if inhaled. Causes respiratory tract irritation.

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Ingestion Toxic if swallowed.

Skin May be fatal if absorbed through skin. Causes skin irritation.

Eyes Causes eye burns.

Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

Additional Information

RTECS: BA5075000

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 0,3 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 1,65 mg/l - 48 h

Toxicity to algae EC50 - SELENASTRUM - 2,25 mg/l - 72 h

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

Very toxic to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in ignitingas this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

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SECTION 14. TRANSPORT INFORMATION

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UN number
ADR/RID: 1098 IMDG: 1098 IATA: 1098

UN proper shipping name
ADR/RID: ALLYL ALCOHOL
IMDG: ALLYL ALCOHOL
IATA: Allyl alcohol
Passenger Aircraft: Not permitted for transport
Cargo Aircraft: Not permitted for transport

Transport hazard class(es)
ADR/RID: 6.1 (3) IMDG: 6.1 (3) IATA: 6.1 (3)

Packaging group
ADR/RID: I IMDG: I IATA: -

Environmental hazards
ADR/RID: yes IMDG Marine pollutant: yes IATA: no

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SECTION 15. REGULATORY INFORMATION

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This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

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SECTION 16 - ADDITIONAL INFORMATION

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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.

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		(CODE) SECTION : A039	
Title: SPECIFICATION MANUAL – ALLYL ALCOHOL LR			1 Page of 2

Specification manual – Allyl alcohol LR

C₃H₆O

Mol Wt: 58.08

Product : Allyl alcohol LR
Description : clear liquid
Cat No : A039
Cas No : 107-18-6
Prepared Date : 13.09.2012
Approved Date : 13.09.2012

REVISION HISTORY			
Issue/Rev	Description of Change	Author	Effective Date
01/00	Initial Release	S. Paul Joshua	13.09.2012
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	Specification	Protocol
		LR	
1	Assay (GC)	≥ 98.0 %	2/4/03
2	Boiling range	97 - 98°C	2/3-/-03
3	Density	0.852g/ml	2/3-/-4.2

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