# PROPARGYL ALCOHOL  
**CAS NO 107-19-7**

## MATERIAL SAFETY DATA SHEET  
**SDS/MSDS**

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifiers**
   - **Product name**: Propargyl Alcohol
   - **CAS-No.**: 107-19-7

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
   - **Identified uses**: Laboratory chemicals, Industrial & for professional use only.

1.3 **Details of the supplier of the safety data sheet**
   - **Company**: Central Drug House (P) Ltd
     7/28 Vardaan House
     New Delhi -110002
     INDIA
   - **Telephone**: +91 11 49404040
   - **Email**: care@cdhfinechemical.com

1.4 **Emergency telephone number**
   - **Emergency Phone #**: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

### SECTION 2: Hazards identification

2.1 **Classification of the substance or mixture**

   **Classification according to Regulation (EC) No 1272/2008**
   - Flammable liquids (Category 3), H226
   - Acute toxicity, Inhalation (Category 3), H331
   - Acute toxicity, Dermal (Category 3), H311
   - Acute toxicity, Oral (Category 3), H301
   - Skin corrosion (Category 1B), H314
   - Chronic aquatic toxicity (Category 2), H411

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

2.2 **Label elements**

   **Labelling according Regulation (EC) No 1272/2008**

   **Pictogram**

   ![Pictogram](image)

   **Signal word**: Danger

   **Hazard statement(s)**

   - H226: Flammable liquid and vapour.
SECTION 3: Composition/information on ingredients

3.1 Substances
Synonyms : 2-Propyn-1-ol

Formula : C₉H₁₄O
Molecular weight : 56.06 g/mol
CAS-No. : 107-19-7
EC-No. : 203-471-2
Index-No. : 603-078-00-X

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propargyl alcohol</td>
<td>Flam. Liq. 3; Acute Tox. 3; Eye Dam. 1; Aquatic Chronic 2; STOT RE 2; H226, H301, H330, H310, H314, H318, H411, H373</td>
<td>&lt;= 100 %</td>
</tr>
</tbody>
</table>

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

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
Take off contaminated clothing and shoes immediately. 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.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

5.2 Special hazards arising from the substance or mixture
Carbon oxides

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. 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. Discharge into the environment must be avoided.

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 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.
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.
Recommended storage temperature 2 - 8 °C
Storage class (TRGS 510): Flammable Liquids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 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.

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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineer 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).

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: clear, liquid
   Colour: light yellow.

b) Odour
   No data available

c) Odour Threshold
   No data available

d) pH
   No data available

e) Melting point/freezing point
   Melting point/range: -53 °C - lit.

f) Initial boiling point and boiling range
   114 - 115 °C - lit.

g) Flash point
   33 °C - closed cup

h) Evaporation rate
   No data available

i) Flammability (solid, gas)
   No data available

j) Upper/lower flammability or explosive limits
   No data available

k) Vapour pressure
   No data available

l) Vapour density
   1.94 - (Air = 1.0)

m) Relative density
   0.963 g/cm3 at 25 °C
n) Water solubility No data available
o) Partition coefficient: n-octanol/water No data available
p) Auto-ignition temperature No data available
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
Relative vapour density 1.94 - (Air = 1.0)

SECTION 10: Stability and reactivity

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
Oxidizing agents, Strong acids, Strong bases, Amines, Phosphorous pentoxide, Isocyanate vapor Strong oxidizing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - male and female - 56.4 mg/kg(Propargyl alcohol) (OECD Test Guideline 401)
LC50 Inhalation - Rat - 4 h - 1.41 mg/l(Propargyl alcohol) (OECD Test Guideline 403)
LD50 Dermal - Rabbit - female - 88 mg/kg(Propargyl alcohol) (OECD Test Guideline 402)

Skin corrosion/irritation
Skin - Rabbit(Propargyl alcohol) Result: Causes burns.
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit(Propargyl alcohol) Result: Corrosive - 24 h
(OECD Test Guideline 405)

Respiratory or skin sensitisation
No data available(Propargyl alcohol)

Germ cell mutagenicity
Hamster(Propargyl alcohol) ovary
Result: negative
OECD Test Guideline 474 (Propargyl alcohol)
Mouse - male
Result: negative

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 (Propargyl alcohol)

Specific target organ toxicity - single exposure
No data available (Propargyl alcohol)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available (Propargyl alcohol)

Additional Information
Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 5 mg/kg (Propargyl alcohol)
RTECS: UK5075000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea (Propargyl alcohol)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) - 1.53 mg/l - 96.0 h (Propargyl alcohol)
Toxicity to daphnia and other aquatic invertebrates Immobilization EC50 - Daphnia magna (Water flea) - 3.36 mg/l - 48 h (Propargyl alcohol) (OECD Test Guideline 202)
Toxicity to algae Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - > 98.1 mg/l - 72 h (Propargyl alcohol) (OECD Test Guideline 201)

12.2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d (Propargyl alcohol)
Result: 95% - Readily biodegradable (OECD Test Guideline 301C)

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available (Propargyl alcohol)

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
Toxic to aquatic life with long lasting effects.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
ADR/RID: 2929  IMGD: 2929  IATA: 2929

14.2 UN proper shipping name
ADR/RID:  TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (Propargyl alcohol)
IMGD:  TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (Propargyl alcohol)
IATA:  Toxic liquid, flammable, organic, n.o.s. (Propargyl alcohol)

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

14.4 Packaging group
ADR/RID: I  IMGD: I  IATA: I

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

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

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

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

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.