SAFETY DATA SHEET

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

1.1 Product identifiers

Product name : Propargyl alcohol

Product Number : P50803
Brand : Aldrich
Index-No. : 603-078-00-X
CAS-No. : 107-19-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO  63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 2), H330
Acute toxicity, Dermal (Category 2), H310
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Specific target organ toxicity - repeated exposure (Category 2), Liver, Kidney, H373
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 2), H411
For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

**Pictogram**

![Pictogram](image)

**Signal Word**

Danger

**Hazard statement(s)**

- **H226** Flammable liquid and vapor.
- **H301** Toxic if swallowed.
- **H310 + H330** Fatal in contact with skin or if inhaled.
- **H314** Causes severe skin burns and eye damage.
- **H373** May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure.
- **H411** Toxic to aquatic life with long lasting effects.

**Precautionary statement(s)**

- **P210** Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
- **P233** Keep container tightly closed.
- **P240** Ground/bond container and receiving equipment.
- **P241** Use explosion-proof electrical/ventilating/lighting/equipment.
- **P242** Use only non-sparking tools.
- **P243** Take precautionary measures against static discharge.
- **P260** Do not breathe mist or vapors.
- **P262** Do not get in eyes, on skin, or on clothing.
- **P264** Wash skin thoroughly after handling.
- **P270** Do not eat, drink or smoke when using this product.
- **P271** Use only outdoors or in a well-ventilated area.
- **P273** Avoid release to the environment.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.
- **P284** Wear respiratory protection.
- **P301 + P310 + P330** IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
- **P301 + P330 + P331** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- **P302 + P350 + P310** IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
- **P303 + P361 + P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- **P304 + P340 + P310** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
- **P305 + P351 + P338 + P310** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
- **P314** Get medical advice/attention if you feel unwell.
- **P362** Take off contaminated clothing and wash before reuse.
- **P370 + P378** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- **P391** Collect spillage.
- **P403 + P233** Store in a well-ventilated place. Keep container tightly closed.
- **P403 + P235** Store in a well-ventilated place. Keep cool.
- **P405** Store locked up.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS
Lachrymator.

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Synonyms</th>
<th>2-Propyn-1-ol</th>
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<tbody>
<tr>
<td>Formula</td>
<td>C₃H₄O</td>
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<tr>
<td>Molecular weight</td>
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<tr>
<td>CAS-No.</td>
<td>107-19-7</td>
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<tr>
<td>EC-No.</td>
<td>203-471-2</td>
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<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>prop-2-yn-1-ol</td>
<td>Flam. Liq. 3; Acute Tox. 3;</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 2; Skin Corr. 1B;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye Dam. 1; STOT RE 2;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquatic Acute 2; Aquatic Chronic 2; H226, H301, H330, H310, H314, H318, H373, H401, H411</td>
<td></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
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled
After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed
If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting.
(only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

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**
  - Carbon dioxide (CO2) Foam Dry powder

- **Unsuitable extinguishing media**
  - For this substance/mixture no limitations of extinguishing agents are given.

5.2 **Special hazards arising from the substance or mixture**

- Carbon oxides
- Combustible.
  - Vapors are heavier than air and may spread along floors.
  - Forms explosive mixtures with air at elevated temperatures.
  - Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 **Advice for firefighters**

- Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 **Further information**

- Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

**SECTION 6: Accidental release measures**

6.1 **Personal precautions, protective equipment and emergency procedures**

- Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 **Environmental precautions**

- Do not let product enter drains. Risk of explosion.

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

- Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 **Reference to other sections**

- For disposal see section 13.
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion
Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage stability
Recommended storage temperature
2 - 8 °C

Storage class
Storage class (TRGS 510): 3: 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

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>prop-2-yn-1-ol</td>
<td>107-19-7</td>
<td>TWA</td>
<td>1 ppm</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Remarks. Danger of cutaneous absorption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Potential for dermal absorption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL</td>
<td>1 ppm</td>
<td>California permissible exposure limits for chemical contaminants (Title 8, Article 107)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada
8.2 Exposure controls

Appropriate engineering controls
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles.

Skin protection
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: butyl-rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested: Butoject® (KCL 898)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact
Material: Chloroprene
Minimum layer thickness: 0.65 mm
Break through time: 60 min
Material tested: KCL 720 Camapren®

Body Protection
Flame retardant antistatic protective clothing.

Respiratory protection
Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds
The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure
Do not let product enter drains. Risk of explosion.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance
   Form: clear, liquid
   Color: light yellow

b) Odor
   No data available

c) Odor Threshold
   No data available

d) pH
   No data available

e) Melting point/freezing point
   Melting point/range: -53 °C (-63 °F) - lit.

f) Initial boiling point and boiling range
   114 - 115 °C 237 - 239 °F - lit.

g) Flash point
   33 °C (91 °F) - 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) Vapor pressure
   20.8 hPa at 25 °C (77 °F)

l) Vapor density
   1.94 - (Air = 1.0)

m) Density
   0.963 g/cm3 at 25 °C (77 °F) - lit.
   Relative density
   No data available

n) Water solubility
   1,000 g/l at 20 °C (68 °F) - soluble

o) Partition coefficient: n-octanol/water
   log Pow: -0.35 at 25 °C (77 °F)

p) Autoignition temperature
   365 °C (689 °F) at 1,013 hPa

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 vapor density
   1.94 - (Air = 1.0)
SECTION 10: Stability and reactivity

10.1 Reactivity
Vapor/air-mixtures are explosive at intense warming.

10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions
Violent reactions possible with:
- alkali hydroxides
- Oxidizing agents
- conc. sulfuric acid
- Heavy metal salts
Risk of ignition or formation of inflammable gases or vapours with:
- Oxides of phosphorus

10.4 Conditions to avoid
Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation.

10.5 Incompatible materials
various plastics

10.6 Hazardous decomposition products
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
( OECD Test Guideline 401)
LC50 Inhalation - Rat - 4 h - 1.41 mg/l - vapor

( OECD Test Guideline 403)
LD50 Dermal - Rabbit - female - 88 mg/kg
( OECD Test Guideline 402)
No data available

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

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

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
Test Type: Hamster
Test system: ovary
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Species: Mouse
Application Route: inhalation (vapor)
Method: OECD Test Guideline 474
Result: negative

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

11.2 Additional Information

Repeated dose toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - 5 mg/kg

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

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

**SECTION 12: Ecological information**

12.1 Toxicity

Aldrich - P50803
Toxicity to fish
flow-through test LC50 - Pimephales promelas (fathead minnow) - 1.53 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates
Immobilization EC50 - Daphnia magna (Water flea) - 3.36 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae
Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - > 98.1 mg/l - 72 h
(OECD Test Guideline 201)

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

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties
No data available

12.7 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT (US)
UN number: 2929 Class: 6.1 (3) Packing group: I
Proper shipping name: Toxic liquids, flammable, organic, n.o.s. (prop-2-yn-1-ol) (prop-2-yn-1-ol)
Reportable Quantity (RQ): 1000 lbs
Poison Inhalation Hazard: No

IMDG
UN number: 2929 Class: 6.1 (3) Packing group: I EMS-No: F-E, S-D
Proper shipping name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (prop-2-yn-1-ol) (prop-2-yn-1-ol)

**IATA**

UN number: 2929  Class: 6.1 (3)  Packing group: I

Proper shipping name: Toxic liquid, flammable, organic, n.o.s. (prop-2-yn-1-ol) (prop-2-yn-1-ol)

**SECTION 15: Regulatory information**

**SARA 302 Components**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Revision Date</th>
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<tbody>
<tr>
<td>prop-2-yn-1-ol</td>
<td>107-19-7</td>
<td>2007-07-01</td>
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</tbody>
</table>

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

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<thead>
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<th>Revision Date</th>
</tr>
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**Pennsylvania Right To Know Components**

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<td>prop-2-yn-1-ol</td>
<td>107-19-7</td>
<td>2007-07-01</td>
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</tbody>
</table>

**SECTION 16: Other information**

**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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.5  Revision Date: 08/27/2023  Print Date: 12/24/2023