2-Propen-1-ol (cas 107-18-6) MSDS

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

1.1 Product identifiers

Product name: Allyl alcohol
Product Number: 240532
Brand: Anonymous
Index-No.: 603-015-00-6
CAS-No.: 107-18-6

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

Identified uses: Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 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.

2.2 Label elements

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

Pictogram

Signal word: Danger

Hazard statement(s)
- H225: Highly flammable liquid and vapour.
- 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 Hazard Statements: none


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.

2.3 Other hazards  
Photosensitizer., Lachrymator.

3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances  
Synonyms  : 2-Propan-1-ol  
Formula  : C3H6O  
Molecular Weight  : 58.08 g/mol  
Component                  Concentration
Allyl alcohol
   CAS-No.    107-18-6
   EC-No.     203-470-7
   Index-No.  603-015-00-6

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

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  
Carbon oxides

5.3 Advice for firefighters  
Wear self contained breathing apparatus for fire fighting 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  
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.

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.

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.

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.
Handle and store under inert gas.

7.3 Specific end uses
no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters
Components with workplace 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.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

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).

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties
a) Appearance Form: 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: -129 °C - lit.
f) Initial boiling point and boiling range 96 - 98 °C - lit.
g) Flash point no data available
h) Evaporation rate no data available
i) Flammability (solid, gas) no data available
j) Upper/lower Upper explosion limit: 18 %(V)
k) Vapour pressure
   - Lower explosion limit: 2.5 % (V) at 55 °C
   - 31.7 hPa at 25 °C

l) Vapour density
   - 2.01 - (Air = 1.0)

m) Relative density
   - 0.854 g/cm³ at 25 °C

n) Water solubility
   - no data available

o) Partition coefficient: n-octanol/water
   - no data available

p) Autoignition 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
   - no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
   - no data available

10.2 Chemical stability
   - no data available

10.3 Possibility of hazardous reactions
   - no data available

10.4 Conditions to avoid
   - Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials
   - Alkali metals, Oxidizing agents

10.6 Hazardous decomposition products
   - Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 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

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Toxic if inhaled. Causes respiratory tract irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>Skin</td>
<td>May be fatal if absorbed through skin. Causes skin irritation.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes eye burns.</td>
</tr>
</tbody>
</table>

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

12. ECOLOGICAL INFORMATION

12.1 Toxicity

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>LC50 - Pimephales promelas (fathead minnow) - 0,3 mg/l - 96,0 h</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>EC50 - Daphnia magna (Water flea) - 1,65 mg/l - 48 h</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>EC50 - SELENASTRUM - 2,25 mg/l - 72 h</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
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: 1098
IMDG: 1098
IATA: 1098

14.2 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

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

14.4 Packaging group
14.5 Environmental hazards
ADR/RID: yes  IMDG: I  IMDG Marine pollutant: yes  IATA: -

14.6 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
no data available

15.2 Chemical Safety Assessment
no data available

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 this document is based on the resent 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. guidechem shall not be
held liable for any damage resulting from handling or from contact with the above product.
See reverse side of invoice or packing slip for additional terms and conditions of sale.