



<b>Allyl Chloride</b> <b>CAS No 107-05-1</b>	<b>MATERIAL SAFETY DATA SHEET</b> <b>SDS/MSDS</b>
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 Product identifiers**  
Product name : **Allyl Chloride**  
  
CAS-No. : 107-05-1
- 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  
Ansari Road Daryaganj  
New Delhi-110002  
INDIA  
  
Telephone : +91 11 49404040  
Email : [care@cdhfinechemical.com](mailto: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 2), H225  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Skin irritation (Category 2), H315  
Eye irritation (Category 2), H319  
Germ cell mutagenicity (Category 2), H341  
Carcinogenicity (Category 2), H351  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335  
Specific target organ toxicity - repeated exposure (Category 1), Nervous system, Liver, Kidney, H372  
Acute aquatic toxicity (Category 1), H400  
  
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



Signal word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapour.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H372	Causes damage to organs (Nervous system, Liver, Kidney) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
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

### 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.  
Lachrymator.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms	:	3-Chloro-1-propene Chlorallylene
Formula	:	C3H5Cl
Molecular weight	:	76.52 g/mol
CAS-No.	:	107-05-1
EC-No.	:	203-457-6
Index-No.	:	602-029-00-X

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

Component	Classification	Concentration
<b>3-Chloro-1-propene</b>		
CAS-No.	107-05-1	<= 100 %
EC-No.	203-457-6	
Index-No.	602-029-00-X	
	Flam. Liq. 2; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2; Muta. 2; Carc. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1; H225, H302, H332, H312, H315, H319, H341, H351, H335, H373, H400 M-Factor - Aquatic Acute: 10	

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**

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, Hydrogen chloride gas

### **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

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.

##### 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 AXBEK (EN 14387) respirator cartridges as a backup to engine 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<br>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: -130 °C - lit.         |
| f) Initial boiling point and boiling range | 44 - 48 °C - lit.                           |
| g) Flash point                             | -31.99 °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: 11.2 %(V) Lower explosion limit: 3.2 %(V)
k) Vapour pressure	295.207 mmHg at 20 °C 1,063.986 mmHg at 55 °C
l) Vapour density	2.64 - (Air = 1.0)
m) Relative density	0.930-0.940 g/cm <sup>3</sup> at 20 °C
n) Water solubility	Soluble
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 2.64 - (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

Strong oxidizing agents Boron trifluoride, Sulfuric acid, Nitric acid, Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas  
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 - female - 275 mg/kg(3-Chloro-1-propene)  
(OECD Test Guideline 401)  
LC50 Inhalation - Rat - 2 h - 11 mg/l(3-Chloro-1-propene)  
LD50 Dermal - Rabbit - 398 mg/kg(3-Chloro-1-propene)

#### Skin corrosion/irritation

Skin - Rabbit(3-Chloro-1-propene)

#### Serious eye damage/eye irritation

Eyes - Rabbit(3-Chloro-1-propene)

**Respiratory or skin sensitisation**

No data available(3-Chloro-1-propene)

**Germ cell mutagenicity**

In vitro tests showed mutagenic effects(3-Chloro-1-propene)

**Carcinogenicity**

Limited evidence of carcinogenicity in animal studies(3-Chloro-1-propene)  
(3-Chloro-1-propene)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (3-Chloro-1-propene)

**Reproductive toxicity**

No data available(3-Chloro-1-propene)

**Specific target organ toxicity - single exposure**

May cause respiratory irritation.(3-Chloro-1-propene)

**Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. - Nervous system, Liver, Kidney

**Aspiration hazard**

No data available(3-Chloro-1-propene)

**Additional Information**

RTECS: UC7350000

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, Vomiting(3-Chloro-1-propene)

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(3-Chloro-1-propene)

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 250 mg/l - 24 h(3-Chloro-1-propene)

**12.2 Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d(3-Chloro-1-propene)  
Result: 95 % - Readily biodegradable  
(OECD Test Guideline 301C)

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available(3-Chloro-1-propene)

**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**

Very toxic to aquatic life.

**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

- |  |  |                           |             |
|--|--|---------------------------|-------------|
| <b>14.1 UN number</b>                    | ADR/RID: 1100  | IMDG: 1100                | IATA: 1100  |
| <b>14.2 UN proper shipping name</b>      | ADR/RID: ALLYL CHLORIDE<br>IMDG: ALLYL CHLORIDE<br>IATA: Allyl chloride<br>Passenger Aircraft: Not permitted for transport |                           |             |
| <b>14.3 Transport hazard class(es)</b>   | ADR/RID: 3 (6.1)   | IMDG: 3 (6.1)             | IATA: 3 (I) |
| <b>14.4 Packaging group</b>              | ADR/RID: I   | IMDG: I                   | IATA: I     |
| <b>14.5 Environmental hazards</b>        | ADR/RID: no  | IMDG Marine pollutant: no | IATA: no    |
| <b>14.6 Special precautions for user</b> | 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.**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H372	Causes damage to organs (/*_ORGAN_REPEAT*/) through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

#### 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](http://www.cdhfinechemical.com) for additional terms and conditions of sale.