



MATERIAL SAFETY DATA SHEETS

18

Allyl chloride

1. CHEMICAL IDENTITY

Chemical Name : Allyl chloride

Chemical Classification: Toxic

Trade Name :

Synonyms: 3-Chloro-1-propene, Chlorallylene, 3-Chloropropylene, 3-Chloropropene

Formula : C₃H₅Cl

CAS No: 107-05-1

UN No: 1100

Regulated Identification

Shipping Name :

Hazchem Code : 3YE

Codes / Label : Class 6.1, Toxic

Hazardous Waste ID No :

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Allyl chloride	107-05-1	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 44-45

Physical State: Liquid

Appearance: Colorless or pale yellow liquid.

Melting Pt °C: -134.5

Vapour Pressure @ 35°C mmHg: 368 mm Hg at 25 °C

Odour: Unpleasant, pungent odour.

Vapour Density(Air =1): 2.64

Solubility in water at 30°C g/100ml: 0.36

Others:

Specific Gravity (Water =1): 0.9376 at 20 °C

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability : Yes

LEL: 2.9

Flash Point °C in OC: -28.9

TDG Flammability:

UEL: 11.1

Flash Point °C in CC: -31.7

Autoignition Temperature °C : 392

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : Releases irritating hydrogen chloride gas on combustion

Hazardous Polymerization :

Combustible Liquid:

Explosive Material:

Corrosive Material

Flammable Material:

Oxidiser :

Others:

Pyrophoric Material:

Organic Peroxide :

4. REACTIVITY DATA

Chemical Stability : Stable at room temperature in closed containers under normal storage and handling conditions.

Incompatibility with other material : Strong oxidizers, acids, amines, iron & aluminum chlorides, magnesium, zinc

Reactivity : Explosion hazard when exposed to acids or oxidizing agents, Explosive reaction with alkyl aluminum chlorides + aromatic hydrocarbons (e.g.,

benzene or toluene). Violently exothermic polymerization reaction with Lewis acids.

Hazardous Reaction Products : Hydrogen chloride, phosgene, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, skin, eyes and ingestion

Effects of Exposure / Symptoms:

Inhalation: Causes irritation of the respiratory tract with burning pain in the nose and throat. Vapors may cause dizziness or suffocation. Skin: Causes skin irritation and possible burns, especially if the skin is wet or moist. Eyes: Contact with eyes may cause severe irritation, and possible eye burns. Ingestion: Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

Emergency Treatment :

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth respiration.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Eyes: Get medical aid immediately. Do not allow victim to rub or keep eyes closed. Extensive irrigation is required (at least 30 minutes).

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

LD50 (oral-rat) mg/kg:	425 mg/kg	STEL:	2 ppm (6 mg/m ³)
LC50 (rat) mg/kg:	2100 ppm/4 hr	Odour Threshold:	0.47 ppm
Permissible Exposure Limit:	1 ppm (3 mg/m ³)	TLV (ACGIH) :	1 ppm (3 mg/m ³)

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	3	3	1	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Wear appropriate protective eyeglasses or chemical safety goggles.

Wear appropriate gloves to prevent skin exposure. Wear appropriate protective clothing to prevent skin exposure.

Handling : Wash thoroughly after handling. Wash hands before eating. Use only in a well ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage : Keep away from sources of ignition. Store in a cool, dry place. Keep container closed when not in use.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Use water spray, dry chemical, alcohol foam or carbon dioxide.

Special Procedure : Use water to keep fire-exposed containers cool. If leak or spill has not ignited, use water spray to disperse vapours and to provide protection for men attempting to stop leak. Water spray may be used to flush spills away from exposures.

Unusual Hazards :

EXPOSURE: First Aid Measures:

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not use mouth-to-mouth respiration.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Eyes: Get medical aid immediately. Do not allow victim to rub or keep eyes closed. Extensive irrigation is required (at least 30 minutes).

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition. Provide ventilation.

Waste Disposal Method:

8. ADDITIONAL INFORMATION / REFERENCES

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :

Contact person

MAILING ADDRESS :

in Emergency :

TELEPHONE / TELEX NOS :

Local Bodies involved :

TELEGRAPHIC ADDRESS :

Standard Packing :

OTHERS :

Trem Card Details / Ref :

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