

**MSDS for Allyl chloroformate, 97%**

**\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\***

**Section 1 - Chemical Product and Company Identification**

**MSDS Name** Allyl chloroformate, 97%

**Synonyms**

**Company Identification**

Atul Ltd - PP Site  
P.O. Atul 3960 20  
Dist -Valsad  
Gujarat, India

Telephone nos

0091 2632 233621 / 233474

**Section 2 - Composition, Information on Ingredients**

<b>CAS#</b>	<b>Chemical Name</b>	<b>%</b>	<b>EINECS#</b>
2937-50-0	Allyl chloroformate	97%	220-916-6

Hazard Symbols: T  
Risk Phrases: 10 22 23 34

**Section 3 - Hazards Identification**

**EMERGENCY OVERVIEW**

Flammable. Harmful if swallowed. Toxic by inhalation. Causes burns. Moisture sensitive.

**POTENTIAL HEALTH EFFECTS**

**Eye** Contact with eyes may cause severe irritation, and possible eye burns. Lachrymator.

**Skin** May cause severe irritation and possible burns.

**Ingestion** Harmful if swallowed. Causes gastrointestinal tract burns.

**Inhalation** May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract. Toxic if inhaled.

**Chronic** Not available.

#### **Section 4 - First aid Measures**

**Eyes** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

**Skin** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion** May cause methemoglobinemia, cyanosis, convulsions, and death.

**Inhalation** Remove from exposure to fresh air immediately.

#### **Notes to Physician**

#### **Section 5 - Fire Fighting Measures**

**General Information** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Flammable Liquid.

**Extinguishing Media** Do NOT use water directly on fire. Use foam, dry chemical, or carbon dioxide.

#### **Section 6 - Accidental Release Measures**

**General Information** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks** Absorb spill with inert material, (e.g., vermiculite, dry sand or earth), then place into a chemical waste container. Remove all

sources of ignition. Use a spark-proof tool.

## Section 7 - Handling and Storage

**Handling** Use spark-proof tools and explosion proof equipment. Do not get on skin and clothing. Do not breathe dust, vapor, mist, or gas. Use only in a chemical fume hood.

**Storage** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Refrigerator/flammables.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls** Use adequate ventilation to keep airborne concentrations low.

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes** Wear safety glasses and chemical goggles if splashing is possible.

**Skin** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Clothing** Wear appropriate protective clothing to minimize contact with skin.

**Respirators** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

## Section 9 - Physical and Chemical Properties

**Physical State** Clear liquid

**Appearance** Not available.

**Odor** Not available.

**pH** Not available.

**Vapor Pressure** 20 mmHg @ 25 C

<b>Viscosity</b>	Not available.
<b>Boiling Point</b>	109 - 110 deg C @ 760.00mm Hg
<b>Freezing/Melting Point</b>	Not available.
<b>Autoignition Temperature</b>	Not available.
<b>Flash Point</b>	31 deg C ( 87.80 deg F)
<b>Explosion Limits, lower</b>	Not available.
<b>Explosion Limits, upper</b>	Not available.
<b>Decomposition Temperature</b>	
<b>Solubility</b>	decomposes in water
<b>Specific Gravity/Density</b>	1.1360g/cm <sup>3</sup>
<b>Molecular Formula</b>	C <sub>10</sub> H <sub>12</sub> O <sub>2</sub>
<b>Molecular Weight</b>	120.54

### **Section 10 - Stability and Reactivity**

<b>Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>Conditions to Avoid</b>	Incompatible materials, exposure to moist air or water.
<b>Incompatibilities with Other Materials</b>	Acids, strong bases, alcohols, amines.
<b>Hazardous Decomposition Products</b>	Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.
<b>Hazardous Polymerization</b>	Has not been reported.

## Section 11 - Toxicological Information

**RTECS#** CAS# 2937-50-0: LQ5775000  
**LD50/LC50** CAS# 2937-50-0: Inhalation, mouse: LC50 = 23100 ug/m<sup>3</sup>; Inhalation, rat: LC50 = 32400 ug/m<sup>3</sup>; Oral, mouse: LD50 = 210 mg/kg; Oral, rat: LD50 = 244 mg/kg.  
**Carcinogenicity** Allyl chloroformate - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	ALLYL CHLOROFORMATE	ALLYL CHLOROFORMATE	ALLYL CHLOROFORMATE
<b>Hazard Class:</b>	6.1	6.1	-
<b>UN Number:</b>	1722	1722	1722
<b>Packing Group:</b>	-	I	-
<b>Dangerous Goods Code:</b>		-	6.1(28A)

## Section 15 - Regulatory Information

### European/International Regulations

#### European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

- R 10 Flammable.
- R 22 Harmful if swallowed.
- R 23 Toxic by inhalation.
- R 34 Causes burns.

Safety Phrases:

- S 16 Keep away from sources of ignition - No smoking.
- S 33 Take precautionary measures against static discharges.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 2937-50-0: No information available.

United Kingdom Occupational Exposure Limits

Canada

CAS# 2937-50-0 is listed on Canada's NDSL List.

CAS# 2937-50-0 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 2937-50-0: OEL-RUSSIA: STEL 0.4 mg/m<sup>3</sup>; Skin

US FEDERAL

TSCA

CAS# 2937-50-0 is listed on the TSCA inventory.