Shiva Pharmachem Limited

Material Safety Data Sheet

PROPARGYL CHLORIDE

Section 1 - Product and Company Information

Substance Trade Name Chemical Family Company	 Propargyl Chloride Propargyl Chloride Alkyl Chloride Shiva Pharmachem Ltd. Plot No. 588, Village Luna – 391440 Taluka Padra, Dictrict: Vadedara, Cuiarat
	District: Vadodara, Gujarat, India.
Phone No. Fax No.	: +91-2662-221021 / 224360 : +91-2662-223314

Section 2 - Composition / Information on Ingredients

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight.
Propargyl Chloride	624-65-7	210-856-9	C ₃ H ₃ CI	74.51 g/mol

Section 3 – Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIROMENT

Highly Flammable. Toxic by inhalation. In contact with skin and if swallowed, causes burns.

Section 4 – First Aid Measures

INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.

EYE Contact

In Case of contact with eyes, flush with copious amounts of water at least 15 minutes. Assure adequate flushing by separating the eyelids. Call a physician.

INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting.

Section 5 – Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: For small (incipient) fires, use media such as "alcohol" foam, dry chemical or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray, Solid steams of water may be ineffective. Cool all affected containers with flooding quantities of water.

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Special Risks

Specific Hazard(s): Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.

Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6 – Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut down all sources of ignition.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry lime or soda ash. Keep in a closed container and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete

Section 7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks and open flame. Store at $2-8^{\circ}$ C.

Section 8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Special protective Measures: Wear appropriate government approved respirator, chemical – resistant glove, safety goggles, other protective clothing.

Face shield (8 Inch minimum)

Section 9 - Physical and Chemical Properties

Appearance Color Form : Slightly yellow-green

: Clear Liquid

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Property	: Value at Temperature or Pressure
Property PH BP/BP Range MP/MP Range Flash Point Flammability Autoignition Temp Oxidizing Properties Explosive Properties Explosive Limits Lower Vapor Pressure SG/Density Partition Coefficient	: Value at Temperature or Pressure : N/A : 57.0 – 58.0° C : N/A : 19° C Method: Closed Up : N/A : N/A
Viscosity Vapor Density Saturated Vapor Conc Evaporation Rate Bulk Density Decomposition Temp. Solvent Content Water Content Surface Tension Conductivity Miscellaneous Data Solubility	: N/A : 5.33 g/l : N/A : N/A : N/A : N/A : N/A : N/A : N/A : N/A : N/A : N/A

Section 10 - Stability and Reactivity

STABILITY:

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Hydrogen chloride gas, carbon dioxide.

Section 11 - Toxicological Information

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, Wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Inhalation may result in spasm, inflammation and Edema of the larynxand bronchi, chemical pneumonitis and pulmonary Edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin.

ROUTE OF EXPOSURE

Multiple Routes: May be fatal if inhaled, Swallowed or absorbed through skin.

Section 12 - Ecological Information

No Data Available.

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Section 13 - Disposal Considerations

SUBSTANCE DISPOSAL

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal state and local environmental regulations. Contact a licensed professional waste service to dispose off this material.

Section 14 - Transport Information

RID/ADR UN No. Hazard Class PG Subrisk Proper Shipping Name	: 3286 : 3 : II : 6.1, 8 : Flammable liquid, toxic, corrosive, n.o.s
IMDG UN No. Hazard Class PG Subrisk Proper Shipping Name Marine pollutant Severe Marine Pollutant Technical Name	: No
IATA UN No. Hazard Class PG Subrisk Proper Shipping Name Inhalation Packing Group I Technical Name	: 3286 : 3 : II : 6.1,8 : Flammable liquid, toxic, corrosive, n.o.s : No : Required

Section 15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES INDICATION OF DANGER: F-T

Highly Flammable, Toxic

R-PHRASES: 11-23/24/25-34

Highly flammable. Toxic by inhalation in contact with skin and if swallowed, Causes burns.

S-PHRASES: 16-26-27-36/37/39-45

Keep away from sources of ignition no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately.

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Country Specific information Germany

WGK: 2 ID-Number: 1715 KBwS-Decision

Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Shiva Pharmachem Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incident, consequential or exemplary damages, howsoever arising, even if Shiva Pharmachem Ltd has been advised of the possibility of such damages