

EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

CYCLOPROPANE CARBONYL CHLORIDE

Section 1 - Product and Company Information

Substance : Cyclopropane carboxylic acid Chloride Trade Name : Cyclopropane Carbonyl Chloride

Chemical Family : Acid Chloride

Company : Shiva Pharmachem Ltd.

Plot No. 588,

Village: Luna - 391440

Taluka: Padra

District: Vadodara, Gujarat

India

Phone No. : + 91 -2662 221021 / 224360

Fax No. : +91 2662 223314

Section 2 - Hazards Identification

2.1 Classification of the substances or mixture

Classification according to regulations (EC) no 1272 / 2008 (EU GHS/CLP)

Flammable liquid (Category 3), Skin Corrosion, (Category 1B)

Classification according to EU directives67/548/EEC or 1999/45/EC

Causes burn, Flammable

2.2 Labeling elements

Labeling according to EC 1272 / 2008 (CLP)

Pictogram





Single word

Hazard Elements

H226 Flammable liquid and vapour.

H314 Causes severe skin burn and eye damage

Precautionary statements

P280 Wear protective gloves/protective clothing/eye and face protection

P305 + P351 + P338 IF IN EYES: Rinse cautiously for several minutes.

P310 Immediately call physician

Supplemental Hazard statement: None

According to EU directives 67/548/EEC as amended

Hazard symbol(s)





EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

R PHRASE (s)

R10 Flammable R34 Causes burn

S PHRASE (s)

S26 In case of contact with eyes rinse immediately with plenty of water

and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or you feel unwell, seek medical advice. (Show

the label where possible)

2.3 Other hazard None

Section 3 – Composition / Information on Ingredients

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight
Cyclopropane Carbonyl Chloride	4023-34-1	223-684-4	C ₄ H ₅ CIO	104.54 g/mol

Section 4 - First Aid Measures

GENERAL INFORMATION

Consult a physician. Show this safety data sheet to the doctor in attendance.

INHALATION

If breathed in , move person into fresh air. If not breathing give artificial respiration Consult a Physician.

EYE CONTACT

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

Skin Contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult 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

SUITABLE EXTINGUISHING MEDIA

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 streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

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

FURTHER INFORMATION

Use water spray to cool unopened containers.



EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

Most important symptoms and effects, both acute and delayed

Material is extremely destructive to tissues of the mucous membrane and upper respiratory tract, eyes and skin., cough, shortness of breath, headache, nausea.

Section 6 - Accidental Release Measures

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

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

METHODS FOR CLEANING UP

Contain spillage and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculate) and place in container for disposal according to local/national revaluations.

Section 7 - Handling and Storage

HANDLING

Directions for Safe Handling:

Avoid inhalation of vapor or mist. Keep away form sources of ignition-No smoking. Take measures to prevent the build up of electrostatic charge.

STORAGE

Conditions for safe Storage:

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. Store under inert gas atmosphere. Moisture sensitive.

Section 8 - Exposure Controls / Personal Protection

PERSONAL PROTECTIVE EQUIPMENTS

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).

Hand Protection: The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 347 derived from it. Hand gloves.

Eye Protection: Tightly fitting safety goggles. Face shield (8-inch minimum).



EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 - Physical and Chemical Properties

Appearance Color : Colorless
Form : Clear liquid
Odor : Pungent
pH : Acidic

BP/BP Range : 120-122₀C at 1.013 hPa

MP/MP Range : Not applicable

Flash Point : 23° C Method: closed cup

Flammability : Flammable
Auto ignition Temp : Data not available
SG/Density : 1.142 g/cm³ at 20°C

Solubility : Miscible with toluene, ethylene dichloride, methylene

dichloride etc

Solvent : Nil

Water content : Not applicable. Reacts with water.

Section 10 - Stability and Reactivity

Stability:

Stable under recommended storage conditions.

Materials to Avoid:

Alcohols, Oxidizing agents, Strong bases, alcohols

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions.-Carbon oxides, Hydrogen chloride gas.

Section 11 - Toxicological Information

Acute toxicity: No data availableSkin corrosion/Irritation: No data availableSerious eye damage/eye irritation: No data availableRespiratory or skin sensitization: No data availableGerm cell mutagenicity: No data available

Carcinogenicity:

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data availableSpecific target organ toxicity: No data availableAspiration Hazard: No data available



EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

Potential Health effects:

Inhalation : May be harmful if inhaled. Material is extremely destructive to the tissue of the

Mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed. Causes burns.

Skin: May be harmful if absorbed through skin. Causes skin burns.

Eyes : Causes eye burns.

Sign 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.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material highly flammable. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observation all federal, state and local environmental revaluations. ontact a licensed professional waste dispose of this material.

Contaminated Packaging

Dispose of as unused product.

Section 14 - Transport Information

RID/ADR

UN. No. : 2920

Hazard Class : 8
Packing Group : II
Sub Risk : 3

Proper Shipping Name: CORROSIVE LIQUID, Flammable, N.O.S

(Cyclopropanecarbonyl chloride)

IMDG

UN No. : 2920 Hazard Class : 8 Packing Group : II Sub Risk : 3

Proper Shipping Name: CORROSIVE LIQUID, Flammable, N.O.S

(Cyclopropanecarbonyl chloride)

EMS-No. : F-E, S-C Marine Pollutant : No

IATA

UN No. : 2920 Hazard Class : 8 Sub Risk : 3



EMS/F/02/01 w.e.f. 01.01.2013

Rev.: 02

Next Revision Due: Jan 2015

Material Safety Data Sheet

Packing Group : II

Proper Shipping Name: CORROSIVE LIQUID, Flammable, N.O.S

(Cyclopropanecarbonyl chloride)

Section 15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: C Corrosive.

R-PHRASES:

R-10 : Flammable. R-34 : Causes burns.

S-PHRASES:

S-26 : In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S-36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S-45 : In case of accident or if you feel unwell, seek medical advice immediately

(Show the label where possible).

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.