



Material Safety Data Sheet

2,4 - DICHLORO BENZOYL CHLORIDE

Section 1 - Product and Company Information

Substance : 2,4 – Dichloro Benzoyl Chloride
Trade Name : 2,4 – Dichloro Benzoyl Chloride, DCOC
Chemical Family : Acid Chloride
Company : Shiva Pharmachem Pvt. 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 - Composition / Information on Ingredients

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight.
2,4 – Dichloro Benzoyl Chloride`	89-75-8	201-936-4	C ₇ H ₃ Cl ₃ O	209.46 g/mol

Section 3 – Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIROMENT

HAZARD DISCRIPTION

Highly Corrosive. Reacts violently with water. Causes Burns

Section 4 – First Aid Measures

GENERAL INFORMATION

Immediately remove any clothing soiled by the product.

INHALATION

Supply fresh air, If required, provide artificial respiration. Keep patient warm

Seek immediately medical advice.

EYE Contact

Rinse opened eye atleast for 15-20 Minutes under running water. Then consult a doctor.

SKIN Contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

SWALLOWING

Seek immediate medical advice.



Material Safety Data Sheet

Section 5 – Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Carbon Dioxide. Dry Chemical Powder, sand

Unsuitable: Do not use water

SPECIAL RISKS

Specific Hazards caused by the material, its products of combustion or resulting gases.

Reacts violently with water.

In case of fire, the following can be released: Carbon monoxide and carbon dioxide, Hydrogen Chloride.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self contained respirator. Wear fully protective impervious suit.

Section 6 – Accidental Release Measures

PERSON RELATED SAFETY PRECAUTION(S)

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

METHODS FOR CLEANING UP

Absorb with liquid binding material (sand, dolomite acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated materials as waste according to section 13.

METHODS OF ENVIRONMENTAL PROTECTION(S)

Do not allow material to be released to the environment without proper government permits

Section 7 - Handling and Storage

HANDLING

Directions for safe Handling: Handle under dry protective gas. Keep container tightly sealed. Store in Cool, dry place in tightly closed containers. Ensure good ventilation at work place. Keep ignition sources away.

STORAGE

Conditions of Storage: Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Store away from water/ moisture. Store away from oxidizing agents, strong base. Store under dry inert gas. Protect from humidity and water. This Product is water sensitive.

Section 8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Properly operating chemical fume hood designed for hazardous chemicals and having an average velocity of at least 100 feet per minute.

PERSONAL PROTECTIVE EQUIPMENT

General protective and hygienic measures: The usual precautionary and measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hand before breaks and at the end of work. Avoid contact with eye or skin.



Material Safety Data Sheet

BREATHING EQUIPMENT

Use suitable respirator when high concentration are present.

HAND PROTECTION EQUIPMENT

Use impervious gloves. Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on the quality.

EYE PROTECTION EQUIPMENT

Use safety glasses. Tightly sealed goggles. Full face protection.

BODY PROTECTION EQUIPMENT

Use protective work clothing.

Section 9 - Physical and Chemical Properties

Appearance Color	: Light Yellow
Form	: Liquid
Property	: Value at Temperature or Pressure
PH	: N/A
BP/BP Range	: 149° – 151o C (300-304 ° F)/ 34 mm Hg
MP/MP Range	: 16-18 °C (61-64° F)
Flash Point	: 138° C (280° F)
Flammability	: N/A
Autoignition Temp	: N/A
Oxidizing Properties	: N/A
Explosive Properties	: N/A
Explosive Limits Lower / UPPER	: N/A
Vapor Pressure	: N/A
SG/Density	: 1.494 G/CM3 @ 25° C (68° F)
Partition Coefficient	: N/A
Viscosity	: N/A
Vapor Density	: N/A
Saturated Vapor Conc	: N/A
Evaporation Rate	: N/A
Bulk Density	: N/A
Decomposition Temp.	: N/A
Solvent Content	: N/A
Water Content	: N/A
Surface Tension	: N/A
Conductivity	: N/A
Miscellaneous Data	: N/A
Solubility with water	: Reacts violently
Solubility other Solvents	: Miscible with ether

Section 10 - Stability and Reactivity

STABILITY:

Conditions to avoid: Water/Moisture, Oxidizing agents, Bases

Dangerous Reactions: Reacts violently with water.



Material Safety Data Sheet

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon Monoxide, Carbon dioxide and hydrogen chloride

Section 11 - Toxicological Information

ACUTE TOXICITY

LD50

Oral

Rat: 4640 mg/kg

LD50

Dermal/Skin

Rabbit: 3160 mg/kg

SUBACUTE OF CHRONIC TOXICITY

The registry of Toxic effects of chemical substance (RTECS) reports the following behavioral effects in laboratory animals.

Behavioral	: Somnolence (general depressed activity)
Lungs, Thorax or Respiration	: Dyspnea
Skin And appendages	: Hair, dermatitis, others (after systemic exposure)

Corrosive materials are acutely destructive to the reparatory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation edema and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath headache, nausea and vomiting. Ingestion may cause damage to mouth, throat and esophagus. May cause skin burns of irritation depending on the severity of the exposure.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Swallowing will lead to strong corrosive effect in mouth and throat and to the danger of perforation of esophagus and stomach

No Classification of data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA OR ACGIH.

ROUTE OF EXPOSURE

On the skin: Corrosive effect on skin and mucous membranes. Irritant to skin and mucous membranes.

On the Eye : Strong corrosive effect, Irritating effect.

Sensitization : No sensitization effect known.

Section 12 - Ecological Information

ECOTOXICOLOGICAL EFFECTS

General Information: Do not allow material to be released to the environment without proper government permits.



Material Safety Data Sheet

Section 13 - Disposal Considerations

SUBSTANCE DISPOSAL

Consult state, local or national regulations to ensure proper disposal

Section 14 - Transport Information

DOT

Hazard Class	: 8
Identification No	: UN 3094
Packing Group	: II
Proper Shipping Name	: Corrosive liquid, Water reactive n.o.s
Technical Name	: 2,4 Dichlorobenzoyl Chloride
Label	: 8+4.3

ARD/RID

ARD/RID	: 8 c3 corrosive substances
Danger	: 80
Un-Number	: 3265
Packaging group	: II
Description of goods	: 3265 Corrosive liquid, Acidic, Organic N.o.s (2,4 Dichloro Benzoyl Chloride)

IMDG

IMDG Class	: 8
UN/ID Number	: 3265
Label	: 8
Packaging Group	: II
Proper Shipping Name	: Corrosive liquid, Acidic, organic n.o.s (2,4 Dichloro benzoyl Chloride)

Section 15 - Regulatory Information

CLASSIFICATION AND LABELLING ACCORDING TO U.S DIRECTIVES

HAZARD SYMBOL

C : Corrosive

RISK PHRASES

14 : Reacts violently with water
 34 : Causes Burns

SAFETY PHRASES

8 : Keep container dry
 20 : while using do not eat or drink
 26 : Incase of contact with eyes, rinse immediately with plenty of water and seek medical advice
 30 : Never ass water to this product.
 36/37/39 : In case of accident or if you feel unwell, seek medical advice immediately.
 60 : This material and its container must be disposed of as hazardous waste.



Material Safety Data Sheet

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 Pvt. 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 Pvt. Ltd. has been advised of the possibility of such damages