

Material Safety Data Sheet**2,3 - DICHLORO BENZOYL CHLORIDE****Section 1 - Product and Company Information**

Substance : 2,3 – Dichloro Benzoyl Chloride
Trade Name : 2,3 – Dichloro Benzoyl 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 - Composition / Information on Ingredients

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight.
2,3 – Dichloro Benzoyl Chloride`	2905-60-4	220-811-5	C ₇ H ₃ Cl ₃ O	209.46 g/mol

Section 3 – Hazards Identification**SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIROMENT**

Highly Flammable. Corrosive and causes burns and severe irritation. Reacts violently with water

Section 4 – First Aid Measures**INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen by artificial respiration or give oxygen by trained personnel. Keep warm. Get immediate medical attention.

EYE Contact

Immediately flush the eye with plenty of water at least 20Min. Assure adequate flushing of eyes by separating the eyelids with fingers. Get immediate medical attention if irritation persists or symptoms of overexposure become apparent.

SKIN Contact

Immediately wash skin with plenty of water for at least 20 minute, While removing contaminated clothing and shoes. Get medical attentions especially, if irritation develops persists or symptoms of overexposure become apparent.

INGESTION

If swallowed, Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed by medical personnel. Get medical attention.

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Section 5 – Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Carbon Dioxide. Dry Chemical Powder.
Unsuitable: Water extinguishers are not recommended

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and full 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)

Use personnel protective equipment as listed in Section 8.

METHODS FOR CLEANING UP

Clean up the spills immediately with dry lime, sand or soda ash, observing precautions in the protective equipment section. Sweep up the place into a suitable container for disposal. Refer to section 13 for disposal requirements

Section 7 - Handling and Storage

HANDLING

This product should be handled only by or under the close supervision of those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data. It should be handled in an efficient fume hood or equivalent system. The user should consider that the toxicological and physiological properties of many compounds are not yet well determined and that new hazardous products may arise from coming into contact with the skin or eyes and from contaminating personal clothing.

STORAGE

Store in a cool, dry well ventilated area away from sources of heat, combustible materials and incompatible substances. Keep container tightly closed when not in use. Product is moisture sensitive.

HYGIENE PRACTICES

Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust.

Section 8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Use appropriate engineering control such as process enclosures, local exhaust ventilation or other reengineering controls airborne levels below recommended exposure limits. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA and other recognized standards. Consult with local procedures for selection, training inspection and maintenance of personal protective equipment.

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SKIN PROTECTION EQUIPMENT

Wear suitable protective clothing to prevent contact with skin.

HAND PROTECTION EQUIPMENT

Wear appropriate protective gloves. Consult glove manufacturers for glove permeability data.

EYE/FACE PROTECTION EQUIPMENT

Wear appropriate protective glasses or splash goggles to protect eye and face.

RESPIRATORY PROTECTION

An approved air purifying respirator with an appropriate cartridge or canister may be permissible under certain circumstances where airborne concentration is expected to exceed exposure limits. Protection provided by air purifying respirators is limited to air borne concentration that are typically within 10 times the exposure limit. Use a positive air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or may other circumstances where air purifying respirators may not provide adequate protection.

OTHER PROTECTIVE EQUIPMENTS

Facilities storing or utilizing this material should be equipped with an eye wash facility and safety shower.

Section 9 - Physical and Chemical Properties

Physical Appearance	: Solid
Appearance Color	: White to brown
Property	: Value at Temperature or Pressure
PH	: N/A
BP/BP Range	: 140° C (284o F)/14mm
MP/MP Range	: 30-32 °C (86-89.6° F)
Flash Point	: 167° C (332.6° F)
Flammability	: N/A
Autoignition Temp	: N/A
Oxidizing Properties	: N/A
Explosive Properties	: N/A
Explosive Limits Lower UPPER	: 1.6 %
Vapor Pressure	: N/A
SG/Density	: N/A
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

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Solubility : insoluble (reacts)
Solubility other Solvents : N/A

Section 10 - Stability and Reactivity

STABILITY:

Conditions to avoid: heat Flame and sparks

Incompatibilities with other materials: oxidizing agents, avoid exposure to moist air or water

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Hydrogen Chloride

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 investigate. No. Data reported in the cited references as of the revision date.

ROUTE OF EXPOSURE

Multiple Routes: Harmful if swallowed , inhaled or absorbed through skin. Causes burns.

Section 12 - Ecological Information

ECOTOXICOLOGICAL EFFECTS

Ecotoxicity : N/A
Bioaccumulation : N/A
Biodegradation : N/A
Environmental Stability : N/A

Section 13 - Disposal Considerations

SUBSTANCE DISPOSAL

Consult with your state or local waste requirements or guidelines, if applicable to ensure compliance. Arrange disposal in accordance to the state or local guidelines by licensed disposal company.

Section 14 - Transport Information

DOT

Shipping Name : Corrosive solid acidic organic n.o.s. (2,3 Dichloro Benzoyl Chloride)
Hazard Class : 8
Identification : UN 3261
Packing Group : II
Subpart E labeling Requirement : 8

Section 15 - Regulatory Information

TSCA 8(B) : Inventory Status : Listed on inventory status

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Risk Phrases

: R34 Causes burns

Safety Phrases

: S26 incase of contact with eye, rinse immediately with plenty of water and seek medical advise.

: S36/37/39 wears suitable protective clothing, gloves and eye /face protection

: S45 in case of accident or if you feel unwell, seek medical advise immediately.

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