



## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification

#### 1.1 Product identifiers

**Product Name :** 2-Chlorobenzoyl chloride  
**Cat No.:** AC147140000; AC147140010; AC147140050; AC147142500  
**CAS No. :** 609-65-4

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended uses :** Laboratory chemicals  
**Uses advised against:** Food, drug, pesticide or biocidal product use.

#### 1.3 Details of the supplier of the safety data sheet

**Company :** Krishna Solvechem Limited.  
B/503, Sahayog, S. V. Road,  
Kandivali (West), Mumbai – 400067. India.  
**Telephone :** +91-22-6123 0222  
**Email :** exports@kscl.co.in

#### 1.4 Emergency telephone number

**Emergency Phone :** +91-8657457330

### SECTION 2: Hazards identification

#### 2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	(Category 1 B)
Serious Eye Damage/Eye Irritation	(Category 1)
Corrosive to metals	(Category 1)

#### 2.2 Label elements

**Pictogram :**



**Signal word** Danger

**Hazard statement (s)** May be corrosive to metals



Causes severe skin burns  
and eye damage

**Precautionary  
statement (s)**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep only in original container.

**Inhalation :**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

**IF ON SKIN (or hair):**

If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

**Eyes:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

**Ingestion:**

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Spills:**

Absorb spillage to prevent material damage.

**Storage:**

Store locked up Store in a well-ventilated place.  
Keep container tightly closed  
Store in corrosive resistant polypropylene container with a resistant in liner. Store in a dry place.



<b>Hazards not otherwise classified (HNOC)</b>	<p><b>Disposal:</b> Dispose of contents/container to an approved waste disposal plant</p> <p>Contact with water liberates toxic gas</p>
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**SECTION 3: Composition / information on ingredients**

**3.1**

Component	CAS-No	Weight %
Benzoyl chloride, 2-chloro-	609-65-4	98

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

<b>General Advice:</b>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
<b>If inhalation :</b>	Remove from exposure, lie down. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.
<b>In case of skin contact :</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>In case of eye contact :</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion :</b>	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Clean mouth with water.
<b>4.2 Most important symptoms and effects :</b>	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
<b>4.3 Notes to Physician :</b>	Treat symptomatically

**SECTION 5: Firefighting effects**

**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	CO2, dry chemical, dry sand, alcohol-resistant foam.
<b>Unsuitable Extinguishing Media: :</b>	No information available
<b>5.2 Flash Point :</b>	124 °C / 255.2 °F
<b>Method :</b>	No information available



<b>Autoignition Temperature:</b>	600 °C / 1112 °F
<b>Explosion Limits:</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available
<b>Specific Hazards Arising from the Chemical :</b>	Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Contact with water liberates toxic gas.
<b>Hazardous Combustion Products :</b>	Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Hydrogen Chloride gas

<b>5.4 Protective Equipment and Precautions for Firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b><u>NFPA:</u></b>	<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
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## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>
Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required. Ensure adequate ventilation.
<b>6.2 Environmental precautions</b>
Should not be released into the environment. See section 12 for additional Ecological Information.
<b>6.3 Methods and materials for containment and cleaning up</b>
Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Do not expose spill to water.

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b>
Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water



precautionary measures against static discharges.

## 7.2 Conditions for safe storage

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from water or moist air. Do not store in metal containers. Incompatible Materials. Strong bases. Alcohols. Metals.

## SECTION 8: Exposure controls/personal protection

### 8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Engineering Measures

Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

### 8.2 Exposure controls

#### Personal protective equipment -

##### Eye / Face protection

Tight sealing safety goggles. Face protection shield

##### Skin protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice..

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Light yellow Liquid
b) Odour	Odorless
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	-4 - -3 °C / 24.8 - 26.6 °F
f) Initial boiling point and	238 °C / 460.4 °F @ 760 mmHg



<b>boiling range</b>	
<b>g) Flash point</b>	124 °C / 255.2 °F
<b>h) Evaporation rate</b>	No information available
<b>i) Flammability (solid, gas)</b>	Not applicable
<b>j) Upper/lower flammability or explosive limits</b>	No data available No data available
<b>k) Vapour pressure</b>	No information available
<b>l) Vapour density</b>	6.03
<b>m) Specific Gravity</b>	1.380
<b>n) Solubility</b>	No information available
<b>o) Partition coefficient: n octanol/water</b>	No data available
<b>p) Auto-ignition temperature</b>	600 °C / 1112 °F
<b>q) Decomposition temperature</b>	No information available
<b>r) Viscosity</b>	1.89 mm <sup>2</sup> /s at 20 °C
<b>s) Molecular formula</b>	C7 H4 Cl2 O
<b>t) Molecular Weight</b>	175.01

### SECTION 10: Stability and Reactivity

<b>10.1 Reactive Hazard :</b>	Yes
<b>10.2 Chemical stability :</b>	Stable under normal conditions.
<b>10.3 Possibility of hazardous reactions :</b>	Contact with water liberates toxic gas
<b>10.4 Conditions to avoid :</b>	Excess heat. Exposure to moist air or water. Exposure to moisture. Incompatible products.
<b>10.5 Incompatible materials:</b>	Strong bases, Alcohols, Metals
<b>10.6 Hazardous decomposition products :</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Hydrogen chloride gas
<b>10.7 Hazardous Polymerization</b>	Hazardous polymerization does not occur



## SECTION 11: Toxicological information

### 11.1

#### Information on toxicological effects

##### Acute toxicity:

**Product Information:** No acute toxicity information is available for this product

##### **Component Information**

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation :** No information available

**Sensitization:** No information available

**Carcinogenicity :** The table below indicates whether each agency has any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Benzoyl chloride, 2-chloro-	609-65-4	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects:** No information available.

**Reproductive Effects:** No information available.

**Developmental Effects :** No information available.

**Teratogenicity:** No information available.

**STOT - single exposure :** None known

**STOT - repeated exposure:** None known

**Aspiration hazard :** No information available.

**Symptoms / effects, both acute and delayed:** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information :** No information available

**Other Adverse Effects :** The toxicological properties have not been fully investigated.



## SECTION 12: Ecological information

<b>12.1 Ecotoxicity:</b>	Do not empty into drains.
<b>12.2 Persistence and degradability:</b>	Soluble in water Persistence is unlikely based on information Available.
<b>Bioaccumulation/ Accumulation</b>	No information available
<b>12.3 Mobility:</b>	Will likely be mobile in the environment due to its water solubility.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

<b>14.1 UN number :</b>				
DOT : UN3265	TDG : UN3265			
IATA : UN3265	IMDG : UN3265			
<b>14.2 UN proper shipping name</b>				
<b>DOT :</b>	Corrosive liquid, acidic, organic, n. o. s.			
<b>TDG :</b>	Corrosive liquid, acidic, organic, n. o. s.			
<b>IMDG :</b>	Corrosive liquid, acidic, organic, n. o. s.			
<b>IATA :</b>	Corrosive liquid, acidic, organic, n. o. s.			
<b>14.3 Transport hazard class(es)</b>	DOT: 8	TDG: 8	IMDG: 8	IATA: 8
<b>14.4 Packaging group:</b>	DOT: II	TDG: II	IMDG: II	IATA: II

## SECTION 15: Regulatory information

**15.1 United states of America Inventory:**

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Benzoyl chloride, 2-chloro-	609-65-4	X	ACTIVE	-

**Legend:**





**TSCA - Toxic Substances Control Act, (40 CFR Part 710)**

X - Listed

'-' - Not Listed

**TSCA 12(b) - Notices of Export** Not applicable

**International Inventories:**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia(AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Benzoyl chloride, 2-chloro-	609-65-4	-	X	210-194-0	X	X	X	X	X	KE-05541

**U.S. Federal Regulations**

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**15.2 U.S. State Right-to-Know Regulations:**

Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N



**U.S. Department of Homeland Security** - This product does not contain the any DHS Chemicals.

**Other International Regulations**

**Mexico – Grade** Slight risk, Grade 1  
**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Benzoyl chloride, 2-chloro-	609-65-4	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Benzoyl chloride, 2-chloro-	609-65-4	Not applicable	Not applicable	Not applicable	Not applicable

**SECTION 16: Other information**

**16.1 Prepared By:** Regulatory affairs  
 Krishna Solvechem  
 Limited  
**Email:** exports@kscl.co.in  
**Revision Date:** 19-Jan-2023  
**Print Date:** 19-Jan-2023  
**Revision Summary:** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 C FR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**16.2 Disclaimer:**  
 The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.