

## MATERIAL SAFETY DATA SHEET (MSDS)

### BENZYL CHLORIDE LR

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : BENZYL CHLORIDE LR

Product code : SS0106202500

Identification of the product : Benzyl chloride  
CAS No :100-44-7  
EC No :202-853-6  
Annex No :602-037-00-3

Chemical formula : C7H7Cl / C6H5CH2Cl

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

Use : Industrial. For professional use only.

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

Company identification : SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

##### Classification EC 67/548 or EC 1999/45

Classification : Carc. Cat. 2; R45  
T; R23  
Xn; R22-48/22  
Xi; R37/38-41

##### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Carcinogenicity - Category 1B - Danger (CLP : Carc. 1B) H350  
Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -  
Category 3 - Warning (CLP : STOT SE 3) H335  
Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP :  
STOT RE 2) H373  
Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302

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**2. Hazards identification -DSD (continued)**

Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315  
 Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331  
 Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318

**2.2. Label elements**
**Labelling EC 67/548 or EC 1999/45**
**Symbol(s)**

**Symbol(s)**

: T : Toxic

**R Phrase(s)**

: R45 : May cause cancer.  
 R22 : Harmful if swallowed.  
 R23 : Toxic by inhalation.  
 R37/38 : Irritating to respiratory system and skin.  
 R41 : Risk of serious damage to eyes.  
 R48/22 : Harmful : danger of serious damage to health by prolonged exposure if swallowed.

**S Phrase(s)**

: S53 : Avoid exposure - obtain special instructions before use.  
 S45 : In case of accident or if you feel unwell, seek medical advice immediately ( show the label when possible).

**Contains**

: Benzyl chloride

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H318 : Causes serious eye damage.  
 H331 : Toxic if inhaled.  
 H350 : May cause cancer.  
 H302 : Harmful if swallowed.  
 H315 : Causes skin irritation.  
 H335 : May cause respiratory irritation.  
 H373 : May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

- General
- Prevention

: P201: Obtain special instructions before use.  
 : P280: Wear protective gloves, protective clothing, eye protection, face protection.  
 P271: Use only outdoors or in a well-ventilated area.  
 P260: Do not breathe dust, fume, gas, mist, vapours, spray.  
 P264: Wash thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
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#### 2. Hazards identification -DSD (continued)

- **Response** : P302+P352: IF ON SKIN : Wash with plenty of soap and water.  
P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel unwell.  
P308+P313: If exposed or concerned : get medical advice.  
P332+P313: If skin irritation occurs : Get medical advice.  
P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.  
P363: Wash contaminated clothing before reuse.  
P314: Get medical advice if you feel unwell.
  - **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.  
P405: Store locked up.
  - **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.  
P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
  - Special labelling** : Restricted to professional users. (Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008)
  - Contains** : Benzyl chloride
- 2.3. Other hazards**
- Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : Benzyl chloride  
CAS No :100-44-7  
EC No :202-853-6  
Annex No :602-037-00-3  
Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Benzyl chloride	100 %	100-44-7	202-853-6	602-037-00-3	---	Carc. Cat. 2; R45 T; R23 Xn; R22-48/22 Xi; R37/38-41 ----- Carc. 1B _ H350 Acute Tox. 3 (inhal) _ H331 Eye Dam 1 _ H318 Acute Tox. 4 (oral) _ H302 Skin Irrit. 2 _ H315 STOT SE 3 _ H335 STOT RE 2 _ H373

Contains no other components or impurities which will influence the classification of the product.

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#### 4. First aid measures

##### 4.1. Description of first aid measures

<b>Inhalation</b>	: Immediately call a POISON CENTER or doctor. Remove to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see on this label).
<b>Skin contact</b>	: Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation occurs : Specific treatment (see on this label). Get medical advice.
<b>Eye contact</b>	: Immediately call a POISON CENTER or doctor. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
<b>Ingestion</b>	: Obtain emergency medical attention. Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

##### 4.2. Most important symptoms and effects, both acute and delayed

<b>Symptoms relating to use</b>	: May cause cancer. Causes damage to organ. Causes serious eye damage. Danger of serious damage to health by prolonged exposure through inhalation. Causes skin irritation. May cause respiratory irritation. Swallowing a small quantity of this material will result in serious health hazard.
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##### 4.3. Indication of any immediate medical attention and special treatment needed

<b>General information</b>	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
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#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
<b>Unsuitable extinguishing media</b>	: Do not use a heavy water stream.
<b>Surrounding fires</b>	: Use water spray or fog for cooling exposed containers.

##### 5.2. Special hazards arising from the substance or mixture

<b>Hazardous combustion products</b>	: Under fire conditions, hazardous fumes will be present.
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##### 5.3. Advice for fire-fighters

<b>Protection against fire</b>	: Do not enter fire area without proper protective equipment, including respiratory protection.
<b>Special procedures</b>	: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

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**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

**For emergency responders** : Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

**Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**7. Handling and storage**
**7.1. Precautions for safe handling**

**Handling** : Do not eat, drink or smoke when using this product. Avoid breathing dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Obtain special instructions before use. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

**Special precautions** : Avoid breathing dust, fume, gas, mist, vapours, spray.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

**Specific end use(s)** : None.

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**8. Exposure controls/personal protection**
**8.1. Exposure controls**

<b>Personal protection</b>	: Avoid all unnecessary exposure.
• <b>Respiratory protection</b>	: In case of insufficient ventilation, wear suitable respiratory equipment.
• <b>Hand protection</b>	: Wear protective gloves.
• <b>Skin protection</b>	: Wear suitable protective clothing.
• <b>Eye protection</b>	: Chemical goggles or safety glasses.
• <b>Others</b>	: When using, do not eat, drink or smoke.

**8.2. Control parameters**

<b>Occupational Exposure Limits</b>	: No data available.
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**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

<b>Physical state at 20 °C</b>	: Liquid.
<b>Colour</b>	: Clear Colorless
<b>Odour</b>	: Pungent Odour
<b>Odour threshold</b>	: No data available.
<b>pH value</b>	: No data available.
<b>Melting point [°C]</b>	: -43 °C
<b>Decomposition point [°C]</b>	: N/A
<b>Critical temperature [°C]</b>	: N/A
<b>Auto-ignition temperature [°C]</b>	: 6270C
<b>Flammability (solid, gas)</b>	: N/A
<b>Flash point [°C]</b>	: 60 °C
<b>Boiling point [°C]</b>	: 177 - 181 °C
<b>Initial boiling point [°C]</b>	: 177 °C
<b>Final boiling point [°C]</b>	: 181 °C
<b>Evaporation rate</b>	: N/A
<b>Vapour pressure [20°C]</b>	: 1.6 @ 20C
<b>Vapour pressure mm/Hg</b>	: 1.6 mm Hg @ 20C
<b>Vapour density</b>	: 4,36
<b>Density [g/cm3]</b>	: 1,1
<b>Relative density, gas (air=1)</b>	: N/A
<b>Relative density, liquid (water=1)</b>	: N/A
<b>Solubility in water [% weight]</b>	: Insoluble in water

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**9. Physical and chemical properties (continued)**

Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
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**10.5. Incompatible materials**

Materials to avoid	: Strong acids. Strong bases.
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**10.6. Hazardous decomposition products**

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.
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**11. Toxicological information**
**11.1. Information on toxicological effects**

Acute toxicity	
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**11. Toxicological information (continued)**

• Inhalation	: Toxic if inhaled.
• Dermal	: Based on available data, the classification criteria are not met.
• Ingestion	: Harmful if swallowed.
Corrosion	: Causes serious eye damage.
Irritation	: Causes skin irritation. May cause respiratory irritation.
Sensitization	: Based on available data, the classification criteria are not met.
Mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: May cause cancer.
Toxic for reproduction	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

Toxicity information : Not established.

**12.2. Persistence - degradability**

Persistence - degradability : Biodegradable.

**12.3. Bioaccumulative potential**

Bioaccumulative potential : Not established.

**12.4. Mobility in soil**

Mobility in soil : Not established.

**12.5. Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

Environmental precautions : Avoid release to the environment.



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#### 13. Disposal considerations

##### 13.1. Waste treatment methods

<b>General</b>	: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
<b>Special precautions</b>	: Hazardous waste due to toxicity.

#### 14. Transport information

##### 14.1. Land transport (ADR-RID)

<b>Proper shipping name</b>	: BENZYL CHLORIDE
<b>UN N°</b>	: 1738
<b>H.I. nr</b>	: 68
<b>ADR - Class</b>	: 6.1
<b>Labelling - Transport</b>	: 6.1 : Toxic substances. 8 : Corrosive substance.



<b>ADR - Classification code</b>	: TC1
<b>ADR - Group</b>	: II
<b>ADR - Packing instructions</b>	: P001
<b>ADR - Limited Quantity</b>	: 0
<b>ADR - Tunnel code</b>	



: D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

##### 14.2. Sea transport (IMDG). [English only]

<b>Proper shipping name</b>	: BENZYL CHLORIDE
<b>UN N°</b>	: 1738
<b>IMO-IMDG - Class or division</b>	: 6.1 : Toxic substances. ( 8 : Corrosive substance. )
<b>IMO-IMDG - Packing group</b>	: II
<b>IMO- IMDG - Packing instructions</b>	: P001
<b>IMO-IMDG - Limited quantities</b>	: None

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**14. Transport information (continued)**

IMO-IMDG - Marine pollution : No  
 EMS-Nr : F-A S-B

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name : BENZYL CHLORIDE  
 UN N° : 1738  
 IATA - Class or division : 6.1 : Toxic substances. ( 8 : Corrosive substance. )  
 IATA - Packing group : II  
 IATA - Passenger and Cargo Aircraft : ALLOWED  
 - Passenger and Cargo - Packing : 653  
 instruction  
 - Passenger and Cargo - Maximum : 1 L  
 Quantity/Packing  
 IATA - Cargo only : ALLOWED  
 - Cargo only - Packing instruction : 660  
 - Cargo only - Maximum Quantity/ : 30 L  
 Packing  
 ERG-Nr : 6C

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental : Ensure all national/local regulations are observed.  
 regulations/legislation specific for the  
 substance or mixture  
 REACH Restrictions - Annex XVII : With the exception of those listed below:  
 The components of this product are not subject to restrictions.  
 Annex XVII  
 REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment : It has not been carried out.

**16. Other information**

Revision : Revision - See : \*  
 Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.  
 vPvB: very persistent and very bioaccumulative  
 Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF  
 THE COUNCIL of 16 December 2008 on classification, labelling and packaging of  
 substances and mixtures, amending and repealing Directives 67/548/EEC and

**MATERIAL SAFETY DATA SHEET (MSDS)**

**BENZYL CHLORIDE LR**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**