

MATERIAL SAFETY DATA SHEET**Product Name:** N-BUTYL CHLORIDE**CAS No.:** 109-69-3**Version:** 0**1. Identification**

Product Code : 90069
Company Name : Advent Chembio Private Limited
Address : W-288, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701.
E-mail : info@adventchembio.com
WEBSITE : www.adventchembio.com
Company Phone Number : 022-27690837

2. Hazards Identification**Hazard classification**

Flammable liquids : Category 2
Aspiration hazard : Category 1
Chronic aquatic toxicity : Category 3

Labels elements

Hazard symbol



Signal word : Danger
Hazard statement : Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Harmful to aquatic life with long lasting effects.
Precautionary statement : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid release to the environment.
IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Do NOT induce vomiting.
Store in a well-ventilated place. Keep cool.

3. Composition/information on ingredients

Ingredient : Butyl chloride
CAS No. : 109-69-3
Percent : NLT 99.5%

MATERIAL SAFETY DATA SHEET**Product Name:** N-BUTYL CHLORIDE**CAS No.:** 109-69-3**Version:** 0

Formula : C₄H₉Cl
Molecular Weight : 92.57 g/mol

4. First Aid Measures**Description of first aid measures**

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

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin contact : Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact : 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.

Swallowed : Get medical advice/attention if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed : The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed : No data available

5. Fire fighting measures**Extinguishing media**

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture : Carbon oxides, Hydrogen chloride gas

Advice for firefighters : Wear self contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

MATERIAL SAFETY DATA SHEET**Product Name:** N-BUTYL CHLORIDE**CAS No.:** 109-69-3**Version:** 0

- Environmental precautions** : Do not let product enter drains.
- Methods and materials for containment and cleaning up** : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. Handling and storage

- Precautions for safe handling** : Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
- Conditions for safe storage, including any incompatibilities** : 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.

8. Exposure Controls / Personal Protection

- Exposure limit** : No data available
- Appropriate engineering controls** : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Personal protective equipment**
- Respiratory protection : Dust respirator. Follow local and national regulations
- Hand protection : Protective gloves.
- Eye protection : Safety glasses. A face-shield, if the situation requires.
- Skin and Body Protection : Protective clothing. Protective boots, if the situation requires.

9. Physical and Chemical Properties

- Appearance** : Clear colorless liquid
- Odor** : No data available
- pH** : No data available
- Melting point/freezing point** : -123 °C - lit.
- Initial boiling point and boiling range** : 77-78°C
- Flash Point** : -12 °C - closed cup
- Vapor pressure** : No data available
- Vapor density** : No data available
- Relative density** : 0.886 g/cm³ at 25 °C
- Solubility in water** : No data available
- Solubility (other)** : No data available

10. Stability and Reactivity

- Reactivity** : No data available

MATERIAL SAFETY DATA SHEET**Product Name:** N-BUTYL CHLORIDE**CAS No.:** 109-69-3**Version:** 0

| | | |
|---|---|---|
| Chemical stability | : | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | : | No data available |
| Conditions to avoid | : | Heat, flames and sparks. |
| Incompatible materials | : | Strong oxidizing agents, Strong bases |
| Hazardous decomposition products | : | Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas |

11. Toxicological Information**Information on toxicological effects**

| | | |
|--|---|-------------------|
| Acute toxicity | : | No data available |
| Skin corrosion/irritation | : | No data available |
| Serious eye damage/eye irritation | : | No data available |
| Respiratory or skin sensitization | : | No data available |
| Germ cell mutagenicity | : | No data available |
| Carcinogenicity | | |
| IARC | : | No data available |
| NTP | : | No data available |
| OSHA | : | No data available |
| Reproductive toxicity | : | No data available |
| Route of Exposure | : | No data available |
| Signs and Symptoms of Exposure | : | No data available |

12. Ecological Information

| | | |
|--------------------------------------|---|--------------------|
| Toxicity | : | No data available |
| Persistence and degradability | : | No data available |
| Bioaccumulative potential | : | No data available |
| Mobility in soil | : | No data available. |
| Other adverse effects | : | No data available. |

13. Disposal consideration

| | | |
|-------------------------------|---|--|
| Disposal instructions | : | Offer surplus and non-recyclable solutions to a licensed disposal company. |
| Contaminated packaging | : | Dispose of as unused product. |

MATERIAL SAFETY DATA SHEET**Product Name:** N-BUTYL CHLORIDE**CAS No.:** 109-69-3**Version:** 0**14. Transport Information**

| | UN No. | UN proper shipping name | Hazard Class(es) | Packaging group | Marine Pollutant |
|-------------|--------|-------------------------|------------------|-----------------|------------------|
| DOT | 1127 | CHLOROBUTANES | 3 | II | NO |
| IMDG | 1127 | CHLOROBUTANES | 3 | II | NO |
| IATA | 1127 | CHLOROBUTANES | 3 | II | NO |

15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

16. Other Information**Issue Date :**11/09/2016**Version : 0**

Disclaimer: This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).