1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: 1-Butyl-3-Methylimidazolium chloride

Catalog number: Im0401c

Manufacturer: SOLVIONIC SA
Chemin de la Loge
31078 TOULOUSE
FRANCE

Tel: +33 (0)5 62 25 73 71
Fax: +33 (0)5 61 25 13 98
E-mail: contact@solvionic.com
Emergency call number: (INRS) 01 45 42 59 59

2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute toxicity, Oral (Category 2)
Skin irritation (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)
Chronic aquatic toxicity (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Toxic if swallowed. Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Danger

Hazard statement(s)

H300 Fatal if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 P310 Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard none
Statements


R-phrase(s)
R25 Toxic if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets

Substance not yet fully tested.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Product name</th>
<th>EC number</th>
<th>CAS number</th>
<th>Annex I Index number</th>
<th>%</th>
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<tbody>
<tr>
<td>1-Butyl-3-Methylimidazolium Chloride</td>
<td>/</td>
<td>79917-90-1</td>
<td>/</td>
<td>98</td>
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</table>

4. FIRST AID MEASURES

**Inhalation:**
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

**Skin exposure:**
In case of contact, immediately flush with copious amounts of water. Remove contaminated clothing and shoes.

**Eye exposure:**
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Ingestion:**
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5. FIRE FIGHTING MEASURES

**Extinguishing media:**
Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

**Special risks:**
Emits toxic fumes under fire conditions.

**Special protective equipment for firefighters:**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

**Personal protective equipmen:**
Wear chemical resistant gloves and protective clothing.

**Methods for cleaning up:**
Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE
Handling:
Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Use under nitrogen.

Storage:
Keep tightly closed. Store under nitrogen.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls:
Safety shower and eye bath. Use only in a chemical fume hood.

Personal protective equipment:

Respiratory protection:
Use respirators tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:
Wear chemical safety gloves.

Eye protection:
Wear chemical safety glasses.

Skin protection:
Wear appropriate protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
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<tr>
<td>Smell</td>
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<td>Flash point</td>
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<td>Flammability</td>
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<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
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<td>Vapor pressure</td>
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<td>Density</td>
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<td>Solubility</td>
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<td>Partition coefficient</td>
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<tr>
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</table>

10. STABILITY AND REACTIVITY

Stability:
Stable until 150°C

Hazardous reactions:
Hazardous polymerization will not occur.

Materials to avoid:
Strong oxidizing agents.

Hazardous decomposition products:
Carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxides (NOx), Hydrogen chloride gas (HCl)

11. TOXICOLOGICAL INFORMATION
General informations:
Acute toxicity
No data available
Sensitising
No data available
Chronic exposure
No data available

Route of exposure:
Skin contact: May cause skin irritation.
Skin absorption: May be harmful if absorbed through the skin.
Eye contact: May cause eye irritation.
Inhalation: Material may irritate mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information
RTECS: Not data available

12. ECOLOGICAL INFORMATION

Toxicity
Toxicity to fish LC50 - Danio rerio (zebra fish) - > 101,0 mg/l - 96,0 h
Toxicity to daphnia and other aquatic invertebrates.
EC50 - Daphnia magna (Water flea) - 6,3 mg/l - 48 h

Persistence and degradability
Biodegradability Biotic/Aerobic - Exposure time 28 d
Result: 40 - 50 % - Not readily biodegradable.

Bioaccumulative potential
No data available

Mobility in soil
No data available

Results of PBT and vPvB assessment
No data available

Other adverse effects
Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORTATION INFORMATION

UN number
ADR/RID: 2811 IMDG: 2811 IATA: 2811

UN proper shipping name
ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (1-Butyl-3-methylimidazolium chloride)
IMDG: TOXIC SOLID, ORGANIC, N.O.S. (1-Butyl-3-methylimidazolium chloride)
IATA: Toxic solid, organic, n.o.s. (1-Butyl-3-methylimidazolium chloride)
Transport hazard class(es)
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

Packaging group
ADR/RID: III IMDG: III IATA: III

Environmental hazards
ADR/RID: no IMDG Marine pollutant: yes IATA: no

Special precautions for user
No data available

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

Chemical Safety Assessment
No data available

16. OTHER INFORMATION

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

For research and development use only.