

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 06.05.2019

Version number 1

Revision: 06.05.2019

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Trade name:** Lithium bis(fluorosulfonyl)imide : 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide (2:3 mol ratio) - 99,9%

**Article number:** E268

**1.2 Relevant identified uses of the substance or mixture and uses advised against** No other important information available.

**Application of the substance / the mixture** This product is intended for the exclusive use of Research and Development

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

##### Manufacturer/Supplier:

Solvionic SA  
195 route d'Espagne  
31036 TOULOUSE  
FRANCE

Phone number: +33 (0)5.34.63.35.35

**Further information obtainable from:** HSE Department

#### 1.4 Emergency telephone number:

ORFILA (INRS): +33 (0)1.45.42.59.59

CCHST: 1-800-668-4284 (Canada & U.S.A)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**



GHS05

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

#### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.

##### Hazard pictograms



GHS05



GHS07

**Signal word** Danger

##### Hazard-determining components of labelling:

lithium bis(fluorosulfonyl)imide

##### Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

##### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3 Other hazards

##### Results of PBT and vPvB assessment

**PBT:** Not applicable.

(Contd. on page 2)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.05.2019

Version number 1

Revision: 06.05.2019

**Trade name: Lithium bis(fluorosulfonyl)imide : 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide (2:3 mol ratio) - 99,9%**

vPvB: Not applicable.

(Contd. of page 1)

### SECTION 3: Composition/information on ingredients

#### 3.2 Chemical characterisation: Mixtures

- **Description:** Mixture of substances listed below with nonhazardous additions.

#### - Dangerous components:

CAS: 235789-75-0	1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide	>60–≤95%
EC number: 825-567-9	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 171611-11-3	lithium bis(fluorosulfonyl)imide	>25–≤40%
EC number: 686-526-7	⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### - General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

. **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

. **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

. **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

. **After swallowing:** Call for a doctor immediately.

**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

. **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### 5.3 Advice for firefighters

. **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Use individual protective gear.

**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

#### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

. **Information about fire - and explosion protection:** No special measures required.

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 06.05.2019

Version number 1

Revision: 06.05.2019

**Trade name: Lithium bis(fluorosulfonyl)imide : 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide (2:3 mol ratio) - 99,9%**

(Contd. of page 2)

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

**. Storage:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep container tightly sealed.

**7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

**Additional information about design of technical facilities:** No further data; see item 7.

**8.1 Control parameters**

**- Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**. Additional information:** The lists valid during the making were used as basis.

**8.2 Exposure controls**

**- Personal protective equipment:**

**. General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

**. Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**. Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**. Eye protection:**



Tightly sealed goggles

**. Body protection:** Use protective suit.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**- General Information**

**. Appearance:**

<b>Form:</b>	Fluid
<b>Color:</b>	Colorless to yellow
<b>. Odor:</b>	Not determined.
<b>. Odor threshold:</b>	Not determined.

**- pH-value:** Not determined.

**- Change in condition**

<b>. Melting point/freezing point:</b>	Undetermined.
<b>. Initial boiling point and boiling range:</b>	Undetermined.

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 06.05.2019

Version number 1

Revision: 06.05.2019

**Trade name: Lithium bis(fluorosulfonyl)imide : 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide (2:3 mol ratio) - 99,9%**

(Contd. of page 3)

<b>. Crystallisation temperature / range:</b>	
235789-75-0	1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide - 34,2 °C
- <b>Flash point:</b>	Not applicable.
- <b>Flammability (solid, gas):</b>	Not applicable.
- <b>Decomposition temperature:</b>	Not determined.
- <b>Auto-ignition temperature:</b>	Product is not selfigniting.
- <b>Explosive properties:</b>	Product does not present an explosion hazard.
- <b>Explosion limits:</b>	
. <b>Lower:</b>	Not determined.
. <b>Upper:</b>	Not determined.
- <b>Vapour pressure at 25 °C:</b>	0,2 hPa
- <b>Density at 20 °C:</b>	1,328 g/cm <sup>3</sup>
- <b>Bulk density:</b>	1.328 kg/m <sup>3</sup>
- <b>Relative density</b>	Not determined.
- <b>Vapour density</b>	Not determined.
- <b>Evaporation rate</b>	Not determined.
- <b>Solubility in / Miscibility with</b>	
. <b>water:</b>	Not miscible or difficult to mix.
- <b>Partition coefficient: n-octanol/water:</b>	Not determined.
- <b>Viscosity:</b>	
. <b>Dynamic:</b>	Not determined.
. <b>Kinematic:</b>	Not determined.
- <b>Solvent content:</b>	
. <b>VOC (EC)</b>	0,00 %
<b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.

### **10.2 Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known.

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** Strong oxidizer and strong base.

**10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

Harmful if swallowed.

#### - **Primary irritant effect:**

##### . **Skin corrosion/irritation**

Causes skin irritation.

##### . **Serious eye damage/irritation**

Causes serious eye damage.

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

#### - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

. **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

. **Carcinogenicity** Based on available data, the classification criteria are not met.

. **Reproductive toxicity** Based on available data, the classification criteria are not met.

#### - **Specific target organ toxicity - single exposure**

May cause respiratory irritation.

- **Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

GB

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 06.05.2019

Version number 1

Revision: 06.05.2019

**Trade name: Lithium bis(fluorosulfonyl)imide : 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide (2:3 mol ratio) - 99,9%**

(Contd. of page 4)

### SECTION 12: Ecological information

**12.1 Toxicity**

**Aquatic toxicity:** No further relevant information available.

**12.2 Persistence and degradability** No further relevant information available.

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

**Additional ecological information:****General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

**12.5 Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

**Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**European waste catalogue**

HP 4	Irritant - skin irritation and eye damage
HP 5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6	Acute Toxicity

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

**14.1 UN-Number**

ADR/RID/ADN, ADN, IMDG, IATA

not regulated

**14.2 UN proper shipping name**

ADR/RID/ADN, ADN, IMDG, IATA

not regulated

**14.3 Transport hazard class(es)**

ADR/RID/ADN, ADN, IMDG, IATA

**Class**

not regulated

**14.4 Packing group**

ADR/RID/ADN, IMDG, IATA

not regulated

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user**

Not applicable.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

**UN "Model Regulation":**

not regulated

### SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

**15.2 Chemical safety assessment:**

For this product, no chemical safety assessment has been performed.

(Contd. on page 6)

**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

Printing date 06.05.2019

Version number 1

Revision: 06.05.2019

**Trade name: Lithium bis(fluorosulfonyl)imide : 1-Ethyl-3-methylimidazolium bis(fluorosulfonyl)imide (2:3 mol ratio) - 99,9%**

A Chemical Safety Assessment has not been carried out.

(Contd. of page 5)

**SECTION 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.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

For research and development use only.

**Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**Department issuing SDS:** Environmental Protection Service

**Contact:**

 Mail: [hse@solvionic.com](mailto:hse@solvionic.com)

Phone number: +33 (0)5.34.63.35.35

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3