

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

Printing date 15.04.2020

Version number 2

Revision: 15.04.2020

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

1.1 Product identifier

Trade name: Lithium bis(fluorosulfonyl)imide 99,9%

Article number: M0333A

CAS Number:

171611-11-3

EC number:

686-526-7

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



GHS08

Muta. 2 H341 Suspected of causing genetic defects.



GHS05

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

2.2 Label elements

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

Hazard pictograms



GHS05



GHS07



GHS08

Signal word Danger

Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H341 Suspected of causing genetic defects.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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).

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.04.2020

Version number 2

Revision: 15.04.2020

Trade name: Lithium bis(fluorosulfonyl)imide 99,9%

P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. of page 1)

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances
- CAS No. / Description

171611-11-3 lithium bis(fluorosulfonyl)imide

- Identification number(s)
EC number: 686-526-7

Molecular formula: F₂ H N O₄ S₂ Li

Molar mass: 187,07 g/mol

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:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

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 Thorough dedusting.

 . **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 15.04.2020

Version number 2

Revision: 15.04.2020

Trade name: Lithium bis(fluorosulfonyl)imide 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: Not required.

. 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: Not required.

. Protection of hands:


Protective gloves

Neoprene gloves

To minimise the wetness in the glove due to perspiration changing of gloves during a shift is required.

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.

Neoprene gloves

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:
Form: Crystalline powder

Color: White

. Odor: Not determined.

. Odor threshold: Not determined.

- pH-value: Not applicable.

- Change in condition
. Melting point/freezing point: 144 °C

. Initial boiling point and boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gas): Product is not flammable.

- Decomposition temperature: Not determined.

- Auto-ignition temperature: Not determined.

- Explosive properties: Product does not present an explosion hazard.

(Contd. on page 4)

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

Printing date 15.04.2020

Version number 2

Revision: 15.04.2020

Trade name: Lithium bis(fluorosulfonyl)imide 99,9%

(Contd. of page 3)

- Explosion limits:	
. Lower:	Not determined.
. Upper:	Not determined.
- Vapour pressure at 25 °C:	0,233 hPa

- Density at 20 °C:	1,052 g/cm ³
. Relative density	Not determined.
. Vapour density	Not applicable.
. Evaporation rate	Not applicable.

- Solubility in / Miscibility with	
. water:	Not determined.
- Partition coefficient: n-octanol/water:	Not determined.
- Viscosity:	
. Dynamic:	Not applicable.
. Kinematic:	Not applicable.

9.2 Other information 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**

Suspected of causing genetic defects.

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

- 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.

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

(Contd. on page 5)

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

Printing date 15.04.2020

Version number 2

Revision: 15.04.2020

Trade name: Lithium bis(fluorosulfonyl)imide 99,9%

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.

(Contd. of page 4)

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

HP4	Irritant - skin irritation and eye damage
HP6	Acute Toxicity
HP11	Mutagenic

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 Substance is not listed.

15.2 Chemical safety assessment:

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

A Chemical Safety Assessment has not been carried out.

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.

Department issuing SDS: Environmental Protection Service

(Contd. on page 6)

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

Printing date 15.04.2020

Version number 2

Revision: 15.04.2020

Trade name: Lithium bis(fluorosulfonyl)imide 99,9%

(Contd. of page 5)

Contact:

Mail: 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

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral - Category 4

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

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

Muta. 2: Germ cell mutagenicity - Category 2

*** Data compared to the previous version altered.**

GB