

## **Lithium bis(trifluoromethanesulphonyl)imide 90076-65-6 MSDS**

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

#### **Product identifiers**

Product name : Bis(trifluoromethane)sulfonimide lithium salt  
Index-No. : 616-124-00-9  
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.  
CAS-No. : 90076-65-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

### **SECTION 2: Hazards identification**

#### **Classification of the substance or mixture**

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

Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Dermal (Category 3), H311  
Skin corrosion (Category 1B), H314  
Specific target organ toxicity - repeated exposure (Category 2), H373  
Chronic aquatic toxicity (Category 3), H412  
For the full text of the H-Statements mentioned in this Section, see Section 16.

##### **Classification according to EU Directives 67/548/EEC or 1999/45/EC**

C Corrosive R34  
R52/53  
T Toxic R24/25  
Xn Harmful R48/22

For the full text of the R-phrases mentioned in this Section, see Section 16.

#### **Label elements**

##### **Labelling according Regulation (EC) No 1272/2008**

Pictogram  
Signal word Danger  
Hazard statement(s)  
H301 + H311 Toxic if swallowed or in contact with skin  
H314 Causes severe skin burns and eye damage.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.  
Precautionary statement(s)  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

physician.

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 or doctor/ physician.

Supplemental Hazard none

Statements

**Other hazards - none**

### SECTION 3: Composition/information on ingredients

#### Substances

Synonyms : Bis(trifluoromethylsulfonyl)aminelithium salt

Lithium bistrifluoromethanesulfonimide

Formula : C<sub>2</sub>F<sub>6</sub>LiNO<sub>4</sub>S<sub>2</sub>

Molecular Weight : 287,09 g/mol

CAS-No. : 90076-65-6

EC-No. : 415-300-0

Index-No. : 616-124-00-9

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
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##### Bis(trifluoromethane)sulfonimide lithium salt

CAS-No.	90076-65-6	Acute Tox. 3; Skin Corr. 1B;	<= 100 %
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EC-No.	415-300-0	STOT RE 2; Aquatic Chronic	
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Index-No.	616-124-00-9	3; H301 + H311, H314, H373, H412	
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#### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
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##### Bis(trifluoromethane)sulfonimide lithium salt

CAS-No.	90076-65-6	T, R24/25 - R34 - R48/22 -	<= 100 %
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EC-No.	415-300-0	R52/53	
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Index-No.	616-124-00-9		
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For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### SECTION 4: First aid measures

#### Description of first aid measures

##### General advice

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

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

Take

victim immediately to hospital. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with

water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in

section 11

**Indication of any immediate medical attention and special treatment needed**

no data available

**SECTION 5: Firefighting 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, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides, Hydrogen fluoride, Lithium oxides

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

no data available

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the

environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas. Moisture sensitive.

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure controls/personal protection****Control parameters****Components with workplace control parameters****Exposure controls****Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling

the product.

**Personal protective equipment****Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374,

contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected

according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Use

respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **SECTION 9: Physical and chemical properties**

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

- a) Appearance      Form: powder  
Colour: white
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      7,0 - 9,5 at 10 g/l
- e) Melting point/freezing      Melting point/range: 234 - 238 °C - lit.  
point
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      no data available
- h) Evaporation rate      no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower      no data available  
flammability or  
explosive limits
- k) Vapour pressure      no data available
- l) Vapour density      no data available
- m) Relative density      no data available
- n) Water solubility      ca.10 g/l at 20 °C
- o) Partition coefficient: n- no data available  
octanol/water
- p) Auto-ignition      no data available  
temperature
- q) Decomposition      no data available  
temperature
- r) Viscosity      no data available
- s) Explosive properties      no data available
- t) Oxidizing properties      no data available

### **Other safety information**

no data available

## **SECTION 10: Stability and reactivity**

### **Reactivity**

no data available

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of hazardous reactions**

no data available

### **Conditions to avoid**

Avoid moisture.

### **Incompatible materials**

Strong oxidizing agents

### **Hazardous decomposition products**

Other decomposition products - no data available

In the event of fire: see section 5

## **SECTION 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 sensitisation**

no data available

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

no data available

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

no data available

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

no data available

#### **Aspiration hazard**

no data available

#### **Additional Information**

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract,

eyes, and

skin., Cough, Shortness of breath, Headache, Nausea

## **SECTION 12: Ecological information**

### **Toxicity**

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 20 mg/l - 48 h

other aquatic

invertebrates

### **Persistence and degradability**

no data available

### **Bioaccumulative potential**

no data available

### **Mobility in soil**

no data available

### **Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### **Other adverse effects**

Harmful to aquatic life with long lasting effects.

## **SECTION 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.

## **SECTION 14: Transport information**

### **UN number**

ADR/RID: 2923      IMDG: 2923      IATA: 2923

### **UN proper shipping name**

ADR/RID: CORROSIVE SOLID, TOXIC, N.O.S. (Bis(trifluoromethane)sulfonimide lithium salt)

IMDG: CORROSIVE SOLID, TOXIC, N.O.S. (Bis(trifluoromethane)sulfonimide lithium salt)

IATA: Corrosive solid, toxic, n.o.s. (Bis(trifluoromethane)sulfonimide lithium salt)

### **Transport hazard class(es)**

ADR/RID: 8 (6.1)      IMDG: 8 (6.1)      IATA: 8 (6.1)

### **Packaging group**

ADR/RID: II      IMDG: II      IATA: II

### **Environmental hazards**

ADR/RID: no      IMDG Marine pollutant: no      IATA: no

### **Special precautions for user**

no data available

## SECTION 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**

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

### **Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox.      Acute toxicity

Aquatic Chronic      Chronic aquatic toxicity

H301      Toxic if swallowed.

H301 + H311      Toxic if swallowed or in contact with skin

H311      Toxic in contact with skin.

H314      Causes severe skin burns and eye damage.

H373      May cause damage to organs through prolonged or repeated exposure.

H412      Harmful to aquatic life with long lasting effects.

Skin Corr.      Skin corrosion

### **Full text of R-phrases referred to under sections 2 and 3**

T      Toxic

R24/25      Toxic in contact with skin and if swallowed.

R34      Causes burns.

R48/22      Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R52/53      Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### **Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be

used only as a guide. The information in this document is based on the present state of our knowledge

and is applicable to the product with regard to appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See

and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.