

## SAFETY DATA SHEET

according to Regulation (EU) No. 1907/2006  
Version 3.0 Revision Date 15.07.2007  
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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : **Lithium chloride**

Product Number : 13013  
Brand : Riedel

Company : Sigma-Aldrich Company Ltd.  
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### 2. HAZARDS IDENTIFICATION

#### Risk advice to man and the environment

Harmful if swallowed. Irritating to eyes, respiratory system and skin.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : LiCl  
Molecular Weight : 42.39 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration [%]
<b>Lithium chloride</b>				
7447-41-8	231-212-3	-	Xn, R22- R36/37/38	-

### 4. 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

Wash off with soap and plenty of water. 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

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

### Further information

The product itself does not burn.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

### Environmental precautions

Do not let product enter drains.

### Methods for cleaning up

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

## 7. HANDLING AND STORAGE

### Handling

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

Provide appropriate exhaust ventilation at places where dust is formed.

### Storage

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

hygroscopic

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

#### Eye protection

Safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form                      crystalline

Colour white

**Safety data**

pH 6  
Melting point 605 °C  
Boiling point 1,360 °C  
Flash point no data available  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Density 2.070 g/cm<sup>3</sup>  
Water solubility soluble  
Partition coefficient: log Pow: -2.7  
n-octanol/water

**10. STABILITY AND REACTIVITY**

**Storage stability**

Stable under recommended storage conditions.

**Conditions to avoid**

Exposure to moisture.

**Materials to avoid**

Strong acids, Strong oxidizing agents, Bromine trifluoride

**Hazardous decomposition products**

**Hazardous decomposition products formed under fire conditions.**

Hydrogen chloride gas, Lithium oxides

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

LD50 Oral - rat - 526 mg/kg

**Irritation and corrosion**

no data available

**Sensitisation**

no data available

**Chronic exposure**

no data available

**Signs and Symptoms of Exposure**

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

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Ingestion** Harmful if swallowed.

**Target Organs**

Central nervous system, Kidney, Cardiovascular system., Thyroid.,

**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

no data available

**Ecotoxicity effects**Toxicity to fish LC50 - *Ptychocheilus lucius* - 17 mg/l - 96 hToxicity to daphnia and other aquatic invertebrates. EC50 - *Daphnia magna* (Water flea) - 1.2 mg/l - 64 h**Further information on ecology**

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****ADR/RID**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**15. REGULATORY INFORMATION****Labelling according to EC Directives**

## Hazard symbols

Xn Harmful

## R-phrases(s)

R22 Harmful if swallowed.  
R36/37/38 Irritating to eyes, respiratory system and skin.

## S-phrases(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**16. OTHER INFORMATION****Further information**

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