

# OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599

Email : [info@ottokemi.com](mailto:info@ottokemi.com), Web : [www.ottokemi.com](http://www.ottokemi.com)

ISO 9001: 2015

## MATERIAL SAFETY DATA SHEET

### 1. Identification

#### 1.1 GHS Product identifier

Lithium chloride, anhydrous, 99.99%  
Code L 8301

### 2. Hazard identification

#### 2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

Skin irritation, Category 2

Eye irritation, Category 2

#### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Hazard statement(s)

Warning

H302 Harmful if swallowed  
H315 Causes skin irritation  
H319 Causes serious eye irritation

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/doctor if you feel unwell.  
P330 Rinse mouth.  
P302+P352 IF ON SKIN: Wash with plenty of water/...  
P321 Specific treatment (see ... on this label).  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/attention.

Storage

none

Disposal

P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

none

### 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
lithium chloride	lithium chloride	7447-41-8	none	100%

### 4. First-aid measures

#### 4.1 Description of necessary first-aid measures

##### General advice

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

##### If inhaled

Fresh air, rest. Refer for medical attention.

##### In case of skin contact

Remove contaminated clothes. Rinse skin with plenty of water or shower.

##### In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

##### If swallowed

Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

#### 4.2 Most important symptoms/effects, acute and delayed

SYMPTOMS: Symptoms of exposure to this compound may include vomiting, profuse diarrhea, ataxia, coma, convulsions and local irritation of the skin, eyes and mucous membranes. ACUTE/CHRONIC HAZARDS: This compound is a mild irritant.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Decontamination measures may be effective more than several hours post-ingestion, due to possible delays in absorption of overdose or sustained release tablets. No specific antidotes exist. Hemodialysis is indicated above 3.5 mmol/L, which significantly increases Li clearance, with Li extraction higher from serum than from whole blood or RBCs. No general and rigid indication for hemodialysis can be set, but the need for hemodialysis should be based on clinical and kinetic data determined during the 12 hr following admission. Supportive care is required. /Li+/

#### 5. Fire-fighting measures

##### 5.1 Extinguishing media

###### Suitable extinguishing media

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher.

##### 5.2 Specific hazards arising from the chemical

Flash point data for this chemical are not available. It is probably combustible.

##### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 6. Accidental release measures

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

Use personal protective equipment. 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.

##### 6.2 Environmental precautions

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

##### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. Handling and storage

##### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Dry. Well closed.

#### 8. Exposure controls/personal protection

##### 8.1 Control parameters

###### Occupational Exposure limit values

no data available

###### Biological limit values

no data available

##### 8.2 Appropriate engineering controls

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

##### 8.3 Individual protection measures, such as personal protective equipment (PPE)

###### Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.

###### Respiratory protection

Wear dust mask when handling large quantities.

###### Thermal hazards

no data available

## 9. Physical and chemical properties

Physical state	white odourless solid
Colour	Deliquescent, cubic crystals, granules or crystalline powder
Odour	no data available
Melting point/ freezing point	613\u00b0C(lit.)
Boiling point or initial boiling point and boiling range	1383\u00b0C/1atm(lit.)
Flammability	Not combustible.
Lower and upper explosion limit / flammability limit	no data available
Flash point	12\u00b0C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	Aqueous solution: neutral or slightly alkaline
Kinematic viscosity	no data available
Solubility	In water:832 g/L (20 \u00b0C)
Partition coefficient n-octanol/water (log value)	-2.7
Vapour pressure	1 mm Hg at 547\u00b0C
Density and/or relative density	1.08g/mL at 20\u00b0C
Relative vapour density	no data available
Particle characteristics	no data available

## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

These materials have weak oxidizing or reducing powers. Redox reactions can however still occur. For example, CO<sub>2</sub>, which is often regarded as chemically inert, vigorously oxidizes the strong reducing agent Mg if the two are heated together. The majority of compounds in this class are slightly soluble or insoluble in water. If soluble in water, then the solutions are usually neither strongly acidic nor strongly basic. These compounds are not water-reactive. Some do react with acids: carbonates generate carbon dioxide and heat when treated with acids; fluorides, sulfites and sulfides generate toxic gases (hydrogen fluoride, sulfur dioxide and hydrogen sulfide, respectively) when treated with acids.

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

When heated to decomposition it emits toxic fumes of /chloride/.

## 11. Toxicological information

### Acute toxicity

Oral: LD<sub>50</sub> Rabbit oral 850 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

## 12. Ecological information

### 12.1 Toxicity

Toxicity to fish: LC50; Species: Oncorhynchus mykiss (Rainbow trout, Donaldson trout); Conditions: fresh water, temperature 12 to 13°C, pH 6.9 to 7.8, hardness 92 to 110 mg/L CaCO<sub>3</sub>, dissolved oxygen 9.3 to 10.1 mg/L; renewal; Concentration: 9280 ug/L (95% confidence limit: 6680 to 12300ug/L) for 28 days /total

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Other adverse effects

no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: UN1170

IMDG: UN1170

IATA: UN1170

14.2 UN Proper Shipping Name

ADR/RID: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IMDG: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IATA: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.5 Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
lithium chloride	lithium chloride	7447-41-8	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

#### Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.