

Product Name Lithium chloride

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:

Product Description: Lithium chloride

Synonyms: Lithium monochloride

CAS-No: 7447-41-8 **EC-No.:** 231-212-3

Molecular Formula: LiCl

REACH Registration No: 01-2119560574-35-XXXX

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Recommended Use: Laboratory chemicals and Manufacture of substances

1.3. Details of the supplier of the safety data sheet:

• Company Finar Limited

184-186/P, Chacharwadi Vasna,

Sarkhej-Bavla Highway,

Ta.: Sanand, Dist.: Ahmedabad-382110, Gujarat, India.

Web: www.finarchemicals.com

• E-Mail Address safety.finar@aceto.com; info.finar@aceto.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717



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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label Elements:

Labeling according to Regulation (EC) No 1272/2008

Pictogram



Signal word: Warning

Hazard statement(s)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements

None



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Reduced Labelling (<= 125 ml)

Pictogram



Signal word: Warning

Hazard statement(s) none
Precautionary statement(s) none
Supplemental Hazard Statements none

2.3. Other Hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: Lithium chloride

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Lithium chloride	7447-41-8	231-212-3	> 95

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

• General advice

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

If inhaled

After inhalation: fresh air.

• If Contact with skin

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

• In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.



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• If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2. 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.

4.3. Indication of any immediate medical attention and special treatment needed:

No information Available

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable Extinguishing Media- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. **Unsuitable Extinguishing Media-** For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Hydrogen chloride gas

Lithium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3. Advice for firefighters:

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further Information:

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.



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6.2. Environmental precautions:

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Protect from moisture.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a dry and well-ventilated place. Keep container tightly closed. Protect from direct sunlight. Store under an inert atmosphere. Incompatible Materials. Acids. Strong oxidizing agents. Halogens. Metals.

7.3. 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

8.1. Control parameters:

Ingredients with workplace control parameters

8.2. Exposure Controls:

Personal Protective Equipment:

Eye & Face Protection-

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

Hand Protection –

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves



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(e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact: -

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves

(e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact: -

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection -

Protective clothing.

Respiratory Protection –

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Environmental Exposure Controls –

Do not let product enter drains.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

• Appearance: Crystalline

• Physical State: Solid

• Odor: Odorless

• Odor Threshold: No data available

• **pH:** 7.0 − 8.0

• Melting Point: 605 °C

• Critical Temperature: No data available

• **Vapor Pressure:** 1.33 hPa at 547 °C

• Relative Density: No data available

• **Density:** No data available

• Auto-Ignition Temperature: No data available

• **Decomposition Temperature:** No data available

• Volatility: No data available

• Bulk Density: No data available

• Viscosity, dynamic: No data available

• Viscosity, Kinematic: No data available

• Water/Oil Dist. Co eff.: No data available

• Partition Co-efficient: n-octanol/Water: No data available

• **Ionicity** (in Water): No data available

• Lower Explosion Limit: No data available

• Upper Explosion Limit: No data available

• **Boiling Point/Range:** 1382 °C

• Specific Gravity: 2.060

• Flash Point: No data available

• Water Solubility: 569 g/l at 20 °C

9.2. Other information:

Molecular Formula: LiCl

Molecular Weight: 42.38 g/mol



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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

No data available.

10.2. Chemical stability:

The product is chemically stable under standard ambient conditions (room temperature). .

10.3. Possibility of hazardous reactions:

Risk of explosion with:

Exothermic reaction with:

Alkali metals

halogen-halogen compounds

Violent reactions possible with:

Strong acids

10.4. Conditions to avoid:

Exposure to light. Incompatible products. Exposure to moist air or water.

10.5. Incompatible materials:

Strong acids, Bromine trifluoride, Corrodes steel., Stainless steel, Iron, Nickel, Strong oxidizing agents, Halogens, Metals.

10.6. Hazardous decomposition products:

Chlorine, Hydrogen chloride gas

In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity

LD50 Oral - Rat - male - 526 mg/kg Remarks: (ECHA)

LC50 Inhalation - Rat - male and female - 4 h - > 5.57 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)

Skin irritation

Skin - Rabbit

Result: Severe skin irritation - 24 h

Remarks: (RTECS)



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Eye irritation

Eyes - Rabbit

Result: Eye irritation

(OECD Test Guideline 405)

Sensitisation

Buehler Test - Guinea pig

Result: Not a skin sensitizer. (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Lithium hydroxide Test Type: In vitro

mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Lithium hydroxide monohydrate

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure



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No data available

Aspiration hazard

No data available

11.2 Further Information:

RTECS: OJ5950000

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

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Toxicity to fish

Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 158 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

Static test EC50 - Daphnia magna (Water flea) - 249 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae

Static test ErC50 - Desmodesmus subspicatus (green algae) -> 400 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria

Static test EC50 - activated sludge – 320.05 mg/l - 3 h

(OECD Test Guideline 209)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Lithium hydroxide

12.2 Persistence and degradability:

The methods for determining biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulate potential:

No data available

12.4 Mobility in soil:

No data available



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12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects:

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	-		
14.2 Proper shipping name	ing name Not dangerous goods		ds
14.3 Class	-		
14.4 Packing group	-		
14.5 Environmentally hazardous	No		
14.6 Special precautions for user	-		

SECTION 15: Regulatory information

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

: Not applicable



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Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 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.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Training advice

Provide adequate information, instruction and training for operators.

References: Not available

Created: 22/02/2022

Disclaimer:

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