



Fisher Scientific

Part of Thermo Fisher Scientific

Material Safety Data Sheet

Creation Date 15-Dec-2010

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Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Lithium chloride, anhydrous

Cat No. L120500, L121100, L121500

Synonyms Lithium monochloride.

Recommended Use Laboratory chemicals

Company

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Harmful if swallowed or absorbed through the skin. Irritating to eyes. Severe skin irritant. Contains a known or suspected mutagen.

Appearance White

Physical State Solid

Odor odorless

Target Organs Eyes, Skin, Central nervous system (CNS), Respiratory system, Liver, Kidney, Thyroid

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes

Irritating to eyes. impairment of vision.

Skin

Harmful by skin absorption. Severe skin irritation.

Inhalation

May be harmful if inhaled. May cause irritation of respiratory tract.

Ingestion

May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects.

Chronic Effects

Mutagenic effects have occurred in humans.. May impair fertility. Experiments have shown reproductive toxicity effects on laboratory animals. Liver and kidney injuries may occur.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Skin disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Lithium chloride	7447-41-8	>95

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	No information available.
Method -	No information available.
Autoignition Temperature	No information available.
Explosion Limits	
Upper	No data available
Lower	No data available
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Dry chemical. chemical foam.
Unsuitable Extinguishing Media	No information available.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.

Specific Hazards Arising from the Chemical

Non-combustible.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA **Health** 2 **Flammability** 0 **Instability** 1 **Physical hazards** N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation. Keep people away from and upwind of spill/leak.
Environmental Precautions	Should not be released into the environment
Methods for Containment and Clean Up	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

7. HANDLING AND STORAGE

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Protect from moisture.
Storage	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from direct sunlight. Store under an inert atmosphere.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White
Odor	odorless
Odor Threshold	No information available.
pH	7-8 50 g/l aq.sol.
Vapor Pressure	1.33 hPa @ 547 °C
Vapor Density	No information available.
Viscosity	No information available.
Boiling Point/Range	1382°C / 2519.6°F @ 760 mmHg
Melting Point/Range	605°C / 1121°F
Decomposition temperature	No information available.
Flash Point	No information available.
Evaporation Rate	No information available.
Specific Gravity	2.060
Solubility	No information available.
log Pow	No data available
Molecular Weight	42.38
Molecular Formula	Cl Li

10. STABILITY AND REACTIVITY

Stability	Hygroscopic.
Conditions to Avoid	Exposure to light. Incompatible products. Exposure to moist air or water.
Incompatible Materials	Acids, Strong oxidizing agents, Halogens, Metals

Hazardous Decomposition Products	Hydrogen chloride gas, Chlorine
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lithium chloride	526 mg/kg (Rat)	>2000 mg/kg (Rat)	Not listed

Irritation	Irritating to eyes and skin
Toxicologically Synergistic Products	No information available.
Chronic Toxicity	
Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization	No information available.
Mutagenic Effects	Mutagenic effects have occurred in humans.
Reproductive Effects	Experiments have shown reproductive toxicity effects on laboratory animals.
Developmental Effects	No information available.
Teratogenicity	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated.. See actual entry in RTECS for complete information.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Lithium chloride	Not listed	EC50: 158 mg/L/96h (rainbow trout)	Not listed	Not listed

Persistence and Degradability	Not readily biodegradable.
Bioaccumulation/ Accumulation	No information available
Mobility	.

Component	log Pow
Lithium chloride	-2.66

13. DISPOSAL CONSIDERATIONS

Waste Disposal 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

14. TRANSPORT INFORMATION

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Lithium chloride	X	X	-	231-212-3	-		X	X	X	X	X

Legend:

- X - Listed
- E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - Indicates a commenced PMN substance
- R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).
- Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313
 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No

Reactive Hazard

No

Clean Water Act

Not applicable

Clean Air Act

Not applicable

OSHA

Not applicable

CERCLA

Not Applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations**Mexico - Grade**

No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D1B Toxic materials

D2B Toxic materials



16. OTHER INFORMATION

Prepared By Regulatory Affairs
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Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS