



Material Safety Data Sheet

Section 1: Product and Company Identification			
Product Name	Lithium chloride		
Catalogue Number:	ASC-1026		
E-mail:	Sales@ausamics.com	Website:	Ausamics.com

Section 2: Hazards Identification	
Classification of the substance or mixture Acute toxicity, (Category 4) H302: Harmful if swallowed. Skin irritation, (Category 2) H315: Causes skin irritation. Eye irritation, (Category 2) H319: Causes serious eye irritation.	
Label elements Labelling according to Regulation (EC) No 1272/2008	
Pictogram	
Signal Word	Warning
Hazard Statements H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.	
Precautionary Statements P264 Wash skin thoroughly after handling. 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. P332 + P313 If skin irritation occurs: Get medical advice/ attention. Supplemental Hazard Statements none	
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. Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	

Section 3: Composition / Information on Ingredients	
Mixture	
Formula	CLi
Molecular weight	42,39 g/mol
CAS-No.	7447-41-8



EC-No.		231-212-3	
Component		Classification	Concentration
Lithium chloride			
CAS-No.	7447-41-8	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H315,	<= 100 %
EC-No.	231-212-3	H319	

Section 4: First Aid Measures	
Description of first-aid measures	
General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air.
In case of skin contact	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.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). 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) and/or in section 11.	
Indication of any immediate medical attention and special treatment needed	
No data available	

Section 5: Fire Fighting Measures
Extinguishing media
Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture Hydrogen chloride gas Lithium oxides Not combustible. Ambient fire may liberate hazardous vapors.
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.
Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures
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.
Environmental precautions Do not let product enter drains.



Methods and materials 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 dust.
Reference to other sections For disposal see section 13.

Section 7: Handling and Storage	
Precautions for safe handling For precautions see section 2.	
Conditions for safe storage, including any incompatibilities	
Storage conditions	Tightly closed. Dry. hygroscopic
Storage class	Storage class (TRGS 510): 13: Non-Combustible Solids.

Section 8: Exposure Controls / Personal Protection			
Control parameters			
Ingredients with workplace control parameters			
Derived No Effect Level (DNEL)			
Application Area	Routes of exposure	Health effect	Value
Worker DNEL, acute	dermal	Systemic effects	
Worker DNEL, acute	inhalation	Systemic effects	30 mg/m3
Worker DNEL, longterm	dermal	Systemic effects	
Worker DNEL, longterm	inhalation	Systemic effects	10 mg/m3
Consumer DNEL, longterm	dermal	Systemic effects	
Consumer DNEL, longterm	inhalation	Systemic effects	10 mg/m3
Consumer DNEL, longterm	oral	Systemic effects	
Predicted No Effect Concentration (PNEC)			
Compartment	Value		
Fresh water	10,4 mg/l		
Fresh water sediment	49,9 mg/kg		
Sea water	1,004 mg/l		
Sea sediment	4,99 mg/kg		
Soil	4,13 mg/kg		
Sewage treatment plant	140,2 mg/l		
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.			
Skin protection			
Full contact			
Material: Nitrile rubber			



Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatrill® L
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatrill® L

Body Protection
protective clothing

Respiratory protection

required when dust is 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 entrepreneur must ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures must be properly documented.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Physical state	Crystalline
Color	Colorless
Odor	Odorless
Melting point/freezing point	Melting point/range: 605 °C - lit.
Initial boiling point and boiling range	1.360 °C at 1.013 hPa
Flammability (solid, gas)	The product is not flammable.
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Vapor pressure	1,33 hPa at 547 °C
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	ca.6 at 50 g/l at 20 °C
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	569 g/l at 20 °C - OECD Test Guideline 105-completely soluble
Partition coefficient: n-octanol/water	Not applicable for inorganic substances
Density	2,07 g/cm ³ at 20 °C
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available



Explosive properties	No data available
Oxidizing properties	none
Other safety information	No data available

Section 10: Stability and Reactivity	
Reactivity	No data available
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions	Risk of explosion with: Exothermic reaction with: Alkali metals halogen-halogen compounds Violent reactions possible with: Strong acids
Conditions to avoid	Exposure to moisture.
Incompatible materials	Strong acids, Strong oxidizing agents, Bromine trifluoride, Corrodes steel., Stainless steel, Iron, Nickel
Hazardous decomposition products	In the event of fire: see section 5.

Section 11: Toxicological Information	
Information on toxicological effects	
Mixture	
Acute toxicity	LD50 Oral - Rat - male - 526 mg/kg Remarks: (ECHA) LC50 Inhalation - Rat - male and female - 4 h - > 5,57 mg/l - dust/mist (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)
Skin corrosion/irritation	Skin - Rabbit Result: Severe skin irritation - 24 h Remarks: (RTECS)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Eye irritation (OECD Test Guideline 405)
Respiratory or skin sensitization	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 The value is given in analogy to the following substances: Lithium hydroxide
Carcinogenicity	No data available
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	
Endocrine disrupting properties Product: Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
RTECS: OJ5950000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

Section 12: Ecological Information	
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
Toxicity to Fish (Chronic toxicity)	semi-static test NOEC - Danio rerio (zebra fish) - 18 mg/l - 34 d (OECD Test Guideline 210)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	semi-static test EC50 - Daphnia magna (Water flea) - > 10,4 mg/l - 21 d (OECD Test Guideline 211)
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.



Bioaccumulative potential	No data available
Mobility in soil	No data available
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.
Endocrine disrupting properties Product: Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	No data available

Section 13: Disposal Consideration	
Waste treatment methods Product	Offer surplus and non- recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material
Contaminated packaging	Dispose of as unused product.

Section 14: Transport Information	
UN number	ADR/RID: - IMDG: - IATA: -
UN proper shipping name	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
Transport hazard class(es)	ADR/RID: - IMDG: - IATA: -
Packaging group	ADR/RID: - IMDG: - IATA: -
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	No data available
Further information	Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information	
Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	Observe work restrictions regarding maternity protection in accordance with 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.
Chemical Safety Assessment	A Chemical Safety Assessment has been carried out for this substance.



Section 16: Additional Notes	
Documented By	Ausamics Life Science Sales@Ausamics.com
Revision date	June 11, 2024
Summary of Revisions	This document has been revised to meet the requirements of the US OSHA HazCom 2012 Standard, which supersedes the existing regulations outlined in 29 CFR 1910.1200, in order to align with the internationally recognized globally Harmonized System of Classification and Labeling of chemicals (GHS).
Disclaimer	The information presented in this Safety Data sheet is accurate to the best of our knowledge, information, and belief at the time of publication. It is intended as a guide for the safe handling, use, processing, storage, transportation, disposal, and release of specific materials. However, it should be interpreted as a warranty or quality specification. The provided information pertains solely to the designated material and may not be applicable to its use in combination with other materials or in any process, unless explicitly stated in the text.