

Material Safety Data Sheet

Lithium chloride monohydrate

ACC# 13977

Section 1 - Chemical Product and Company Identification

MSDS Name: Lithium chloride monohydrate

Catalog Numbers: AC389380000

Synonyms:

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
16712-20-2	Lithium chloride monohydrate		unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available. Appearance: white solid.

Not available.

Target Organs: Kidneys, central nervous system, respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects

Eye: Causes moderate eye irritation. Causes redness and pain. May cause visual abnormalities including: blurring, abnormal color vision, loss of sight.

Skin: Causes severe skin irritation. Harmful if absorbed through the skin. Repeated or prolonged exposure may cause drying and cracking of the skin.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause nausea and vomiting. May cause blood electrolyte disturbances. Large doses of lithium may cause dizziness, prostration, and kidney damage. Dehydration, weight loss, slurred speech, blurred vision, sensory loss, ataxia (failure of muscular coordination), tremors, and convulsions may occur. May cause central nervous system effects including nervousness, drowsiness and convulsions.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation. Symptoms of exposure include: increased secretions, cough, pain or respiration,

Chronic: Chronic exposure may cause reproductive disorders and teratogenic effects. Chronic exposure to lithium salts may cause drowsiness, visual abnormalities, weakness, ringing in the ears, and muscle tremors.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: Not published.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Lithium chloride	none listed	none listed	none listed
Lithium chloride monohydrate	none listed	none listed	none listed

OSHA Vacated PELs: Lithium chloride: No OSHA Vacated PELs are listed for this chemical. Lithium chloride monohydrate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white

Odor: odorless

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 614 deg C

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: Not available.

Molecular Formula: CLi.H2O

Molecular Weight: 60.41

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air.

Conditions to Avoid: Incompatible materials, light, exposure to moist air or water, Aqueous solutions are very mildly corrosive to most metals..

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, alkali metals, bromine trifluoride, halogens, sulfuric acid.

Hazardous Decomposition Products: Hydrogen chloride, chlorine, lithium oxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 7447-41-8: 0J5950000

CAS# 16712-20-2 unlisted.

LD50/LC50:

CAS# 7447-41-8:

Draize test, rabbit, eye: 100 mg/24H Moderate;

Draize test, rabbit, skin: 500 mg/24H Severe;

Oral, mouse: LD50 = 1165 mg/kg;

Oral, mouse: LD50 = 1165 mg/kg;

Oral, rabbit: LD50 = 800 mg/kg;

Oral, rabbit: LD50 = 775 mg/kg;

Oral, rat: LD50 = 526 mg/kg;

Oral, rat: LD50 = 1530 mg/kg;

Skin, rabbit: LD50 = 1629 mg/kg;

Skin, rat: LD50 = 1488 mg/kg;

CAS# 16712-20-2:

Carcinogenicity:

CAS# 7447-41-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 16712-20-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: EPA Genetox Program 1988, Negative: Cell transform.-SA7/SHE; B subtilis rec assay

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. Log Pow = -2.7 (anhydrous)

Environmental: No information available.

Physical: No information available.

Other: Non-biodegradable.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated.	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7447-41-8 is listed on the TSCA inventory.

CAS# 16712-20-2 is not listed on the TSCA inventory. It is for research and development use only.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 7447-41-8: immediate, delayed.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7447-41-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 16712-20-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 21/22 Harmful in contact with skin and if swallowed.

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 7447-41-8: 1

CAS# 16712-20-2: 1

Canada - DSL/NDSL

CAS# 7447-41-8 is listed on Canada's DSL List.

Canada - WHMIS

not available.

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

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 4/13/2006

Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.