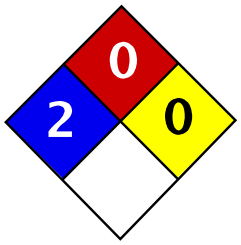

Health	2
Fire	0
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Lithium carbonate MSDS

Section 1: Chemical Product and Company Identification

Product Name: Lithium carbonate

Catalog Codes: SLL1198, SLL1576, SLL1951

CAS#: 554-13-2

RTECS: OJ5800000

TSCA: TSCA 8(b) inventory: Lithium carbonate

CI#: Not available.

Synonym: Lithchips; Dilithium Carbonate; Carbonic Acid, Dilithium salt

Chemical Name: Lithium Carbonate

Chemical Formula: Li2CO3

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Lithium carbonate	554-13-2	100

Toxicological Data on Ingredients: Lithium carbonate: ORAL (LD50): Acute: 525 mg/kg [Rat]. 531 mg/kg [Mouse]. DERMAL (LD50): Acute: >2000 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer).
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to kidneys, peripheral nervous system, central nervous system (CNS), thyroid.
Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Ignites and burns fiercely when in contact with fluorine.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Granular solid. Powdered solid.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 73.89 g/mole

Color: White.

pH (1% soln/water): 11.2 [Basic.]

Boiling Point: Decomposition temperature: 1310°C (2390°F)

Melting Point: 720°C (1328°F)

Critical Temperature: Not available.

Specific Gravity: 2.11 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility:
Partially soluble in cold water.
Very slightly soluble in hot water.
Insoluble in acetone.
1 g dissolves in 78 ml of cold water and in 140 ml of boiling water.
Solubility in water: 1.52% at o C.; 1.31% at 20 C; 1.16 % at 40 C; 1.00 at 60 C; .84 % at 80 C; .71 % at 100 C.
Practically insoluble in alcohol.
Insoluble in Ethanol.
Soluble in acid.
Insoluble in ammonia.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Reacts violently with Fluorine.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:
Acute oral toxicity (LD50): 525 mg/kg [Rat].
Acute dermal toxicity (LD50): >2000 mg/kg [Rat].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells.
May cause damage to the following organs: kidneys, peripheral nervous system, central nervous system (CNS), thyroid.

Other Toxic Effects on Humans:
Hazardous in case of ingestion, of inhalation.
Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive effects and birth defects.
May affect genetic material.
May cause cancer.
Human: passes through the placenta, excreted in maternal milk.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: May cause skin irritation.

Eyes: May cause eye irritation and lacrimation.
Inhalation: May cause respiratory tract irritation with and shortness of breath. May cause pulmonary edema.
Ingestion: May be harmful if swallowed. May cause gastrointestinal tract irritation with abdominal pain, nausea, vomiting, hypermotility, and diarrhea. May affect behavior/central nervous system (tremor, dizziness, slurred speech, muscle weakness, hallucinations, irritability, giddiness, disorientation, distorted perceptions, headache, confusion, seizures, excitement, toxic psychosis, somnolence, ataxia, drowsiness, convulsions, coma), eyes (pupillary constriction, blurred vision), urinary system (kidneys - renal dysfunction), respiratory system(respiratory depression), cardiovascular system.
Chronic Potential Health Effects:
Ingestion: Prolonged or repeated ingestion may affect skin (allergic dermatitis, psoriasis, alopecia), urinary system (kidneys - renal dysfunction), thyroid (thryoid hyperfunction, goiter), cardiovascular system, metabolsim, brain, liver, blood, and endrocrine system (adrenal gland), and eyes (visual abnormalities) and may cause ringing in the ears. It may also affect behavior/central nervous system with symptoms similar to that of acute exposure, and cause "restless leg syndrome", a peripheral neuropathy involving a creeping sensation with a desire to rub or move the legs.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lithium carbonate
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lithium carbonate
Massachusetts RTK: Lithium carbonate
New Jersey: Lithium carbonate
New Jersey spill list: Lithium carbonate
TSCA 8(b) inventory: Lithium carbonate
SARA 313 toxic chemical notification and release reporting: Lithium carbonate

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R22- Harmful if swallowed.
R36- Irritating to eyes.
R40- Possible risks of irreversible effects.
S2- Keep out of the reach of children.
S36/37- Wear suitable protective clothing and gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 08:21 PM

Last Updated: 11/06/2008 12:00 PM

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