Material Safety Data Sheet
Lithium Carbonate
MSDS\# 12880
Section 1 - Chemical Product and Company Identification

| MSDS Name: | Lithium Carbonate |  |
| :--- | :--- | :--- |
| Catalog Numbers: | L119-500 |  |
| Synonyms: | Carbonic Acid Dilithium Salt; Carbonic Acid Lithium Salt |  |
|  |  | Fisher Scientific |
| Company Identification: |  | One Reagent Lane |
|  | Fair Lawn, NJ 07410 |  |
| For information in the US, call: | $201-796-7100$ |  |
| Emergency Number US: | $201-796-7100$ |  |
| CHEMTREC Phone Number, US: | $800-424-9300$ |  |

Section 2 - Composition, Information on Ingredients


Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Warning! May be harmful if swallowed. May cause kidney damage. May cause central nervous system effects. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause reproductive and fetal effects. Target Organs: Kidneys, central nervous system.
Potential Health Effects
Eye: Causes eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.
Inhalation: May cause respiratory tract irritation.
Chronic: Chronic exposure to lithium salts may cause drowsiness, visual abnormalities, weakness, ringing in the ears, and muscle tremors.

## Section 4 - First Aid Measures

Eyes: $\quad$ Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: $\quad$ Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

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:

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved

General Information: or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. For large fires, use dry Media: chemical, carbon dioxide, alcohol-resistant foam, or water spray.
Autoignition Not available.
Temperature:
Flash Point: Not applicable.
Explosion Limits:
Lower: $\mathrm{N} / \mathrm{A}$
Explosion Limits:
Upper:
NFPA Rating: health: 1 ; flammability: 0 ; instability: 0 ;

## Section 6 - Accidental Release Measures

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

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or Spills/Leaks: absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate Handling: ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.
Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Lithium carbonate: None listed
Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.
Exposure Limits
Personal Protective Equipment
Eyes: 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: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
Respirators: 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
Color: white
Odor: none reported
pH : Not available
Vapor Pressure: Negligible.

> Vapor Density: Not available

Evaporation Rate: Negligible.
Viscosity: Not available
Boiling Point: $1310 \mathrm{deg} \mathrm{C}\left(2,390.00^{\circ} \mathrm{F}\right)$
Freezing/Melting Point: $618 \operatorname{deg} \mathrm{C}\left(1,144.40^{\circ} \mathrm{F}\right)$
Decomposition Temperature:
Solubility in water: $1.5 \%$ in water.
Specific Gravity/Density: 2.1 (water=1)
Molecular Formula: Li2CO3
Molecular Weight: 73.8802
Section 10 - Stability and Reactivity
Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition Products
Hazardous Polymerization

Stable under normal temperatures and pressures.
Incompatible materials.
Strong oxidizing agents, strong acids, fluorine.
Carbon monoxide, carbon dioxide, oxides of lithium.
Has not been reported.

Section 11-Toxicological Information
RTECS\#: CAS\# 554-13-2: OJ5800000
RTECS:
CAS\# 554-13-2: Oral, mouse: LD50 $=531 \mathrm{mg} / \mathrm{kg}$;
Oral, mouse: LD50 $=531 \mathrm{mg} / \mathrm{kg}$;
LD50/LC50: Oral, rabbit: LD50 $=404 \mathrm{mg} / \mathrm{kg}$;
Oral, rat: LD50 $=525 \mathrm{mg} / \mathrm{kg}$;
Oral, rat: LD50 $=553 \mathrm{mg} / \mathrm{kg}$;

Carcinogenicity: Lithium carbonate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.
Section 12 - Ecological Information
Other: No information available.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 22 Harmful if swallowed.
R 36 Irritating to eyes.

Safety Phrases:

## WGK (Water Danger/Protection)

CAS\# 554-13-2: 1

## Canada

CAS\# 554-13-2 is listed on Canada's DSL List
Canadian WHMIS Classifications: D2B
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.
CAS\# 554-13-2 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 554-13-2 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 4/24/1998
Revision \#7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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 the company 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 the company has been advised of the possibility of such damages.

