# Fisher Scientific

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		
Company Identification:	Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410		
For information in the US, ca	11: 201-796-7100		
Emergency Number US:	201-796-7100		
CHEMTREC Phone Number	er, US: 800-424-9300		
	Section 2 - Composition, Information on Ingredients		
CAS#:	554-13-2		
Chemical Name:	Lithium carbonate		
⁰⁄₀:	98.0		
EINECS#:	209-062-5		
Hazard Symbols:	XN		
Risk Phrases:	22 36		
	Section 3 - Hazards Identification		
	EMERGENCY OVERVIEW		
Warning! May be harmful i	f swallowed. May cause kidney damage. May cause central nerv		

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:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:	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					
General Information:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved 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 Media:	For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.				
Autoigniti Temperatur	on re: Not available.				
Flash Poir	nt: Not applicable.				
Explosion Limi Lowe	ts: er: N/A				
Explosion Limi Uppe	ts: Pr:				
NFPA Ratin	g: health: 1; flammability: 0; instability: 0;				
	Section 6 - Accidental Release Measures				
General Information:	Use proper personal protective equipment as indicated in Section 8.				
Spills/Leaks:	Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.				
	Section 7 - Handling and Storage				
Handling: venti	h thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate lation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep liner 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				
+					

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Lithium carbonate	none listed	  none listed +	none listed   ++

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 deg C ( 2,390.00°F)					
	Fr	eezing/Melting Point: 618 deg C (1,144.40°F)			
	Decomp	osition 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:		Stable under normal temperatures and pressures.			
Conditions to Avoid:		Incompatible materials.			
Incompatibilities	with Other Materials	Strong oxidizing agents, strong acids, fluorine.			
Hazardous Decor	nposition Products	Carbon monoxide, carbon dioxide, oxides of lithium.			
Hazardous Polym	erization	Has not been reported.			
		Section 11 - Toxicological Information			
RTECS#:	CAS# 554-13-2: OJ	5800000			
	RTECS:				
		al, mouse: LD50 = 531 mg/kg;			
	Oral, mouse: LD50 =				
LD50/LC50:	Oral, rabbit: $LD50 =$ Oral, rat: $LD50 = 525$	6 C.			
	Oral, rat: $LD50 = 553$ Oral, rat: $LD50 = 553$	• •			
Carcinogenicity:	Lithium carbonate - N	Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.			
Other:	See actual entry in R7	TECS for complete information.			
		Section 12 - Ecological Information			
Other:	No information	1 available.			
		Section 13 - Disposal Considerations			
Dispose of in a m	anner consistent with fe	ederal, state, and local regulations.			
		Section 14 - Transport Information			
US DOT					
	t regulated as a hazardo	us material			
Hazard Class: UN Number:					
Packing Group:					
Canada TDG					
Shipping Name: Not	available				
Hazard Class:					
UN Number:					
Packing Group:					
		Section 15 December Information			
Europoon/Intornat	tional Dogulations	Section 15 - Regulatory Information			
-	European/International Regulations				
	abeling in Accordance v	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.

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