

# MATERIAL SAFETY DATA SHEET

**SRM Supplier:** National Institute of Standards and Technology  
Standard Reference Materials Program  
100 Bureau Drive, Stop 2320  
Gaithersburg, Maryland 20899-2320

**SRM Number:** 924a  
**MSDS Number:** 924a  
**SRM Name:** Lithium Carbonate  
**Date of Issue:** 21 January 2004

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## SECTION I. MATERIAL IDENTIFICATION

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**Material Name:** Lithium Carbonate

**Description/Other Designations:** Carbonic Acid, Lithium Salt

Chemical Name	Chemical Formula	CAS Registry Number
Lithium Carbonate	Li <sub>2</sub> CO <sub>3</sub>	554-13-2

**DOT Classification:** No classification assigned

**Manufacturer/Supplier:** Aithaca Chemical Co., Uniondale, NY<sup>(1)</sup>

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## SECTION II. HAZARDOUS INGREDIENTS

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Hazardous Component	Nominal Concentration (%)	Exposure Limits and Toxicity Data
Lithium Carbonate	100	TD <sub>Lo</sub> : 54 mg/Kg, oral-man
		TD <sub>Lo</sub> : 120 mg/Kg/10 day(s), intermittent oral-woman

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## SECTION III. PHYSICAL/CHEMICAL CHARACTERISTICS

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Lithium Carbonate	
<b>Appearance and Odor:</b> white powder, odorless	<b>Vapor Pressure:</b> not applicable
<b>Molecular Weight:</b> 73.89	<b>Vapor Density:</b> not applicable
<b>Specific Gravity (Water = 1):</b> 2.11	<b>Volatility (%):</b> not applicable
<b>Boiling Point:</b> not applicable	<b>Water Solubility (@ 0 °C):</b> 1.5 %
<b>Melting Point (°C):</b> 723	<b>Solvent Solubility:</b> alcohol; acetone; ammonia

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<sup>1</sup> Identification of certain commercial materials in this MSDS does not imply recommendation or endorsement by the National Institute of Standards and Technology, nor does it imply that the materials are necessarily the best available for the purpose.



## EMERGENCY AND FIRST AID PROCEDURES:

**Skin Contact:** Wash skin with plenty of soap and water for at least 15 minutes while removing contaminated shoes and clothing. Obtain medical attention if needed.

**Eye Contact:** Immediately flush eyes, including under the eyelids, with copious amounts of water for at least 15 minutes. Obtain immediate medical assistance.

**Inhalation:** If inhaled, remove the victim to fresh air. If breathing is difficult, give oxygen; if victim is not breathing, give artificial respiration by qualified personnel. Obtain medical assistance.

**Ingestion:** Contact local poison control center or physician immediately. **DO NOT** induce vomiting. Never make an unconscious person vomit or drink fluids. If spontaneous vomiting occurs, lower head to knee level to help prevent aspiration. If person is unconscious, turn head to side.

**TARGET ORGAN(S) OF ATTACK:** Central nervous system (CNS), respiratory system, muscles and kidneys.

**WARNING:** This material contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

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## SECTION VII. PRECAUTIONS FOR SAFE HANDLING AND USE

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**Steps to be Taken in Case Material Is Released or Spilled:** Notify safety personnel of major spills. Evacuate nonessential personnel. Cleanup personnel should be protected against dust inhalation and eye contact. Sweep up material and place in a receptacle appropriate for disposal. Avoid generating dust.

**Waste Disposal:** Follow all federal, state, and local laws governing disposal.

**Handling and Storage:** Keep in a tightly closed container, stored in a cool, dry and well-ventilated area. Local exhaust ventilation is preferred since it prevents contaminant dispersing into the work area by controlling it at its source. Avoid breathing dust and direct contact with this material. Eyewash stations and safety showers should be readily available to areas of handling and use. Wear appropriate chemical resistant gloves. Wear splash resistant safety goggles.

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## SECTION VIII. SOURCE DATA/OTHER COMMENTS

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**Sources:** MDL Information Systems, Inc., MSDS *Lithium Carbonate*, 19 March 2003.

**Disclaimer:** Physical and chemical data contained in this MSDS are provided only for use in assessing the hazardous nature of the material. The MSDS was prepared carefully, using current references; however, NIST does not certify the data on the MSDS. The certified values for this material are given in the NIST Certificate of Analysis.