

Safety Data Sheet

Lithium, Metal

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Lithium, Metal
Recommended Use: Science education applications
Synonyms: Alkali Metal
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



In contact with water releases flammable gases which may ignite spontaneously. Causes severe skin burns and eye damage. Causes serious eye damage.

GHS Classification:

Substance or mixture which in contact with water emits flammable gas Category 1, Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|---|--------------|----------|
| Lithium, Metal | 7439-93-2 | 100 |
| Mineral Oil Holding Fluid (CAS # 7439-93-2) | | |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 5 Firefighting Procedures

Extinguishing Media: Dry lithium chloride, graphite powder, Pyrene G-1, dry sodium chloride, dry (anhydrous) calcium oxide.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Contact with water liberates extremely flammable gases. Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Metal Oxides,

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Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Avoid contact with material. Avoid breathing dust/fume/gas/mist/vapors/spray. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 Handling and Storage

Handling: Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Readily absorbs moisture from air. Reacts violently with water. Keep away from oxidizing materials and strong acids. Avoid contact with skin and eyes.

Storage: Store in a dry place. Store in a closed container. Store locked up. Keep only in the original container in a cool, well-ventilated place away from ... (incompatible materials to be indicated by the manufacturer).

Storage Code: Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8 Protection Information

| Chemical Name | ACGIH | | OSHA PEL | |
|-------------------|-------|--------|----------|--------|
| | (TWA) | (STEL) | (TWA) | (STEL) |
| No data available | N/A | N/A | N/A | N/A |

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile

Section 9 Physical Data

| | |
|--|--|
| Formula: Li | Vapor Pressure: N/A |
| Molecular Weight: 6.941 | Evaporation Rate (BuAc=1): N/A |
| Appearance: Silver Solid | Vapor Density (Air=1): N/A |
| Odor: No data available | Specific Gravity: 0.534 at 25 °C |
| Odor Threshold: No data available | Solubility in Water: Reacts violently with water, liberating extremely flammable gases. |
| pH: No data available | Log Pow (calculated): No data available |
| Melting Point: 185 C | Autoignition Temperature: 179 C |
| Boiling Point: 1342 C | Decomposition Temperature: No data available |
| Flash Point: 871 C | Viscosity: No data available |
| Flammable Limits in Air: N/A | Percent Volatile by Volume: N/A |

Section 10 Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions. Can react violently with water.

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Conditions to Avoid: Exposure to moisture
Incompatible Materials: Acids, Chlorinated compounds, Iron Salts, Moisture, Metals, Heavy Metals,, Sulfur,, Phosphorus compounds,, Nitrogen compounds,
Hazardous Decomposition Products: Metal Oxides,
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry: N/A
Symptoms (Acute): N/A
Delayed Effects: No data available

Acute Toxicity:

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------|------------|----------------|----------------|-----------------|
| No data available | 7439-93-2 | Not determined | Not determined | Not determined |

Carcinogenicity:

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|-------------------|------------|------------|------------|------------|
| No data available | 7439-93-2 | Not listed | Not listed | Not listed |

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2
Chronic: To the best of our knowledge, the toxicological properties of this mixture have not been thoroughly evaluated.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

| Chemical Name | CAS Number | Eco Toxicity |
|---------------|------------|--------------|
| N/A | 7439-93-2 | |

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 Transport Information

| Ground - DOT Proper Shipping Name: | Air - IATA Proper Shipping Name: |
|--|---|
| UN1415, LITHIUM Division 4.3 P.G. I | UN number: 1415 Class: 4.3 Packing group: I Proper shipping name: Lithium IATA Passenger: Not permitted for transport |

Section 15 Regulatory Information

TSCA Status: A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

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| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|-------------------|------------|------------|----------|-----------|-----------|---------------|
| No data available | 7439-93-2 | No | No | No | No | No |

Section 16

Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

| | | | |
|--------|---|------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |