Section 1: Product & Company Identification

Product Name: Lithium General Purpose Grease
Product Number (s): SL3310, SL3311, SL3315, SL3317, 8SL3310
Product Use: Lubricating grease

Manufacturer / Supplier Contact Information:
In United States: CRC Industries, Inc. 885 Louis Drive Warminster, PA 18974 www.crcindustries.com 1-215-674-4300 (General) (800) 521-3168 (Technical) (800) 272-4620 (Customer Service)
In Canada: CRC Canada Co. 2-1246 Lorimar Drive Mississauga, Ontario L5S 1R2 www.crc-canada.ca 1-905-670-2291

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

As defined by OSHA’s Hazard Communication Standard, this product is non-hazardous.
Appearance & Odor: Amber semi-solid to solid grease with a faint petroleum odor

Potential Health Effects:

ACUTE EFFECTS:
  EYE: May cause irritation.
  SKIN: Repeated or prolonged contact can result in drying of the skin.
  INHALATION: Heating can generate vapors that may cause respiratory irritation, nausea, and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product.
  INGESTION: Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.

CHRONIC EFFECTS: Unknown

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: skin or respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined heavy naphthenic distillates</td>
<td>64741-96-4 / 64742-52-5</td>
<td>85 - 95</td>
</tr>
<tr>
<td>Lithium 12-hydroxystearate</td>
<td>7620-77-1</td>
<td>3 – 7</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do not induce vomiting. Seek medical attention.

Note to Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is nonflammable.

Flash Point: 450°F (COC)

Autoignition Temperature: ND

Upper Explosive Limit: ND

Lower Explosive Limit: ND

Fire and Explosion Data:

Suitable Extinguishing Media: CO₂, dry chemical, sand, dolomite, alcohol resistant foam, water spray

Products of Combustion: Oxides of carbon

Explosion Hazards: Containers, when exposed to heat from fire, may build pressure and rupture.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Avoid water in straight hose stream as it will scatter and spread fire.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8. Minimize skin contact

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains. Advise authorities if product has entered waterways.

Methods for Containment & Clean-up: Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Wipe up spilled material. Place used absorbents into proper waste containers.
Section 7: Handling and Storage

Handling Procedures: Keep container away from heat, sparks, and open flame. High temperatures may produce irritating vapors. Eye wash station should be available at work place. Keep containers closed when not in use. Ventilate well, especially in warmer environments. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Containers should be tightly closed while in storage. Store separated from acids, and oxidizing materials. Store away from sparks and open flame.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Refined naphthenic distillate</td>
<td>5*</td>
<td>NE</td>
<td>5*</td>
</tr>
<tr>
<td>Lithium 12-hydroxystearate</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>N.E. – Not Established</td>
<td>(c) – ceiling</td>
<td>(s) – skin</td>
<td>(v) – vacated</td>
</tr>
</tbody>
</table>

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses.

Skin Protection: Use protective gloves such as neoprene or nitrile. Also, use full protective clothing if there is prolonged or repeated contact of material with skin.

Section 9: Physical and Chemical Properties

Physical State: semi-solid grease
Color: amber
Odor: mild petroleum
Odor Threshold: ND
Specific Gravity: 0.90 @ 60°F
Initial Boiling Point: ND
Freezing Point: ND
Vapor Pressure: < 0.1 mmHg @ 68°F
Vapor Density: > 5 (air = 1)
Evaporation Rate: very slow
Product Name: Lithium General Purpose Grease
Product Number(s): SL3310, SL3311, SL3315, SL3317, 8SL3310

Solubility: insoluble in water
Coefficient of water/oil distribution: ND
pH: NA
Volatile Organic Compounds: wt %: < 0.1 g/L: < 0.9 lbs./gal: < 0.01

Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: Heat
Incompatible Materials: Avoid contact with acids and oxidizing substances.
Hazardous Decomposition Products: Oxides of carbon
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined naphthenic distillate</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>2.18 mg/L/4H</td>
</tr>
<tr>
<td>Lithium 12-hydroxystearate</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
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</table>

Chronic Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant</th>
<th>Sensitizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined naphthenic distillate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Lithium 12-hydroxystearate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Reproductive Toxicity: No information available
Teratogenicity: No information available
Mutagenicity: No information available
Synergistic Effects: No information available
Other: Naphthenic distillates:

- Base oils of this product contain < 3% DMSO
- Extractable total polycyclic aromatic compound (PAC) per IP 346.

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Naphthenic distillates: 48 Hr EC50 Daphnia magna: >1000 mg/L
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available
Section 13: Disposal Considerations

**Waste Classification:** This product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33)
Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

**US DOT (ground):** Not Regulated

**ICAO/IATA (air):** Not Regulated

**IMO/IMDG (water):** Not Regulated

**Special Provisions:** None

Section 15: Regulatory Information

**U.S. Federal Regulations:**

**Toxic Substances Control Act (TSCA):**
All ingredients are either listed on the TSCA inventory or are exempt.

**Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):**
Reportable Quantities (RQ’s) exist for the following ingredients: None

**Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.**

**Superfund Amendments Reauthorization Act (SARA) Title III:**
Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:
- Fire Hazard: No
- Reactive Hazard: No
- Release of Pressure: No
- Acute Health Hazard: No
- Chronic Health Hazard: No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
None

**Clean Air Act:**
Section 112 Hazardous Air Pollutants (HAPs): None

**U.S. State Regulations:**

**California Safe Drinking Water and Toxic Enforcement Act (Prop 65):**
This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None
Product Name: Lithium General Purpose Grease
Product Number (s): SL3310, SL3311, SL3315, SL3317, 8SL3310

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:
New Jersey: None
Pennsylvania: None
Massachusetts: None
Rhode Island: None

Canadian Regulations:

Controlled Products Regulations: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: None

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:


Additional Regulatory Information: None

Section 16: Other Information

<table>
<thead>
<tr>
<th>HMIS® (II)</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1</td>
<td>1</td>
</tr>
<tr>
<td>Flammability: 1</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td>0</td>
</tr>
<tr>
<td>PPE: B</td>
<td></td>
</tr>
</tbody>
</table>

Ratings range from 0 (no hazard) to 4 (severe hazard).

Prepared By: Michelle Rudnick
CRC #: 2020
Revision Date: 03/16/2009

Changes since last revision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries’ knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.
Product Name: Lithium General Purpose Grease  
Product Number (s): SL3310, SL3311, SL3315, SL3317, 8SL3310

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH:</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>CAS:</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>CFR:</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>DOT:</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>DSL:</td>
<td>Domestic Substance List</td>
</tr>
<tr>
<td>g/L:</td>
<td>grams per Liter</td>
</tr>
<tr>
<td>HMIS:</td>
<td>Hazardous Materials Identification System</td>
</tr>
<tr>
<td>IARC:</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IATA:</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>ICAO:</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG:</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>IMO:</td>
<td>International Maritime Organization</td>
</tr>
<tr>
<td>lbs./gal:</td>
<td>pounds per gallon</td>
</tr>
<tr>
<td>LC:</td>
<td>Lethal Concentration</td>
</tr>
<tr>
<td>LD:</td>
<td>Lethal Dose</td>
</tr>
<tr>
<td>NA:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>ND:</td>
<td>Not Determined</td>
</tr>
<tr>
<td>NIOSH:</td>
<td>National Institute of Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>NFPA:</td>
<td>National Fire Protection Association</td>
</tr>
<tr>
<td>NTP:</td>
<td>National Toxicology Program</td>
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<tr>
<td>OSHA:</td>
<td>Occupational Safety and Health Administration</td>
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<td>PMCC:</td>
<td>Pensky-Martens Closed Cup</td>
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<tr>
<td>PPE:</td>
<td>Personal Protection Equipment</td>
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<tr>
<td>ppm:</td>
<td>Parts per Million</td>
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<tr>
<td>RoHS:</td>
<td>Restriction of Hazardous Substances</td>
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<td>STEL:</td>
<td>Short Term Exposure Limit</td>
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<tr>
<td>TCC:</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>TWA:</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>WHMIS:</td>
<td>Workplace Hazardous Materials Information System</td>
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</tbody>
</table>