Section 1: Product & Company Identification

Product Name: White Lithium Grease (aerosol)
Product Number (s): 03080
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

In Mexico: CRC Industries Mexico
Av. Benito Juárez 4055 G
Colonia Orquidea
San Luis Potosí, SLP CP 78394
www.crc-mexico.com
52-444-824-1666

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

Section 2: Hazards Identification

Emergency Overview

DANGER: Extremely Flammable. Harmful or Fatal if Swallowed. Contents Under Pressure.
As defined by OSHA’s Hazard Communication Standard, this product is hazardous.
Appearance & Odor: Off-white, viscous grease with solvent odor

Potential Health Effects:

ACUTE EFFECTS:
EYE: May cause mild irritation including stinging and redness, but does not injure eye.
SKIN: Single, brief exposures may cause mild irritation. Frequent or prolonged contact may cause more severe irritation, defatting of the skin, and dermatitis.
INHALATION: High vapor concentrations are irritating to the respiratory tract and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage. Heating the dispensed grease may generate irritating vapors.
INGESTION: Low order of toxicity by ingestion. Main hazard is aspiration into the lungs during swallowing or vomiting. Small amounts aspirated into the respiratory system may cause bronchopneumonia or pulmonary adema, possible progressing to death.

CHRONIC EFFECTS: Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.

TARGET ORGANS: central nervous system, peripheral nervous system, respiratory system

Medical Conditions Aggravated by Exposure: skin and 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>Hexane isomers</td>
<td>64742-49-0</td>
<td>40 - 50</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>3.2</td>
</tr>
<tr>
<td>Heavy naphthenic petroleum distillates</td>
<td>64742-52-5</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>68476-86-8</td>
<td>35 - 45</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. Contact a physician immediately.

Note to Physicians: Treat symptomatically. Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6)).

Flash Point: < 20°F (TCC) Upper Explosive Limit: 9.0
Autoignition Temperature: 489°F Lower Explosive Limit: 1.7

Fire and Explosion Data:

Suitable Extinguishing Media: Class B fire extinguishers, dry chemical, foam or CO₂

Products of Combustion: Fumes, smoke and carbon monoxide

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode. Vapors may accumulate in a confined space and create a flammable atmosphere.

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. Do not spray water directly on fire; product will float and could be reignited on surface of water.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.
Methods for Containment & Clean-up: Dike area to contain spill. Remove all sources of ignition. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Use proper grounding and bonding procedures for transferring materials. Do not use product near any source of ignition. Avoid contact with eyes and skin. Avoid breathing vapors. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: III

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>Hexane isomers</td>
<td>500(v)</td>
<td>1000(v)</td>
<td>500</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>500</td>
<td>NE</td>
<td>50(s)</td>
</tr>
<tr>
<td>Heavy naphthenic petroleum distillates</td>
<td>5</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>1000</td>
<td>NE</td>
<td>1000</td>
</tr>
</tbody>
</table>

N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated

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. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, PVC or Viton. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.
**Section 9: Physical and Chemical Properties**

Physical State: semi-solid / grease  
Color: off-white  
Odor: solvent  
Odor Threshold: ND  
Specific Gravity: 0.6257  
Initial Boiling Point: 140°F  
Freezing Point: <-50°F  
Vapor Pressure: ND  
Vapor Density: >1 (air = 1)  
Evaporation Rate: fast  
Solubility: not soluble in water  
Coefficient of water/oil distribution: ND  
pH: NA  
Volatile Organic Compounds: wt %: 85  
g/L: 531.8  
lbs/gal: 4.43

**Section 10: Stability and Reactivity**

Stability: Stable  
Conditions to Avoid: Sources of ignition, temperature extremes  
Incompatible Materials: Strong oxidizers  
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>Hexane isomers</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>28,710 mg/kg</td>
<td>3000 mg/kg</td>
<td>48,000 ppm/4H</td>
</tr>
<tr>
<td>Heavy naphthenic petroleum distillates</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>

**Chronic Toxicity:**

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant E (mild) / S (mild)</th>
<th>Sensitizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexane isomers</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (moderate) / S (moderate) / R (moderate)</td>
<td>Unknown</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (moderate)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Heavy naphthenic petroleum distillates</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquefied petroleum gas</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

E – Eye      S – Skin      R - Respiratory
Product Name: White Lithium Grease (aerosol)
Product Number(s): 03080

<table>
<thead>
<tr>
<th>Reproductive Toxicity:</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teratogenicity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Mutagenicity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Synergistic Effects:</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Section 12: Ecological Information

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

Ecotoxicity:  
n-hexane - 48 Hr EC50 water flea: 3.87 mg/L  
96 Hr LC50 Lepomis macrochirus: 4.12 mg/L

Persistence / Degradability:  No information available
Bioaccumulation / Accumulation:  No information available
Mobility in Environment:  No information available

Section 13: Disposal Considerations

Waste Classification:  The packaged liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001. The dispensed grease is not a hazardous waste. Pressurized containers are a D003 reactive waste. (See 40 CFR Part 261.20 – 261.33) Empty aerosol 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):  Consumer Commodity, ORM-D
ICAO/IATA (air):  Consumer Commodity, ID8000, 9
IMO/IMDG (water):  Aerosols, UN1950, 2.1, Limited Quantity

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:  n-hexane (5000 lbs)
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  Yes
Product Name: White Lithium Grease (aerosol)
Product Number(s): 03080

<table>
<thead>
<tr>
<th>Reactive Hazard</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of Pressure</td>
<td>Yes</td>
</tr>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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:
n-hexane (3.2%)

Clean Air Act:
Section 112 Hazardous Air Pollutants (HAPs): n-hexane

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

Consumer Products VOC Regulations: This product is not regulated (semi-solid lubricant).

State Right to Know:
Pennsylvania: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Massachusetts: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8
Rhode Island: 75-83-2, 110-54-3, 79-29-8, 68476-86-8

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: A, B5, D2B

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:</td>
<td>2</td>
</tr>
<tr>
<td>Flammability:</td>
<td>3</td>
</tr>
<tr>
<td>Reactivity:</td>
<td>0</td>
</tr>
<tr>
<td>PPE:</td>
<td>B</td>
</tr>
</tbody>
</table>

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

Prepared By: Michelle Rudnick
CRC #: 568G
Revision Date: 11/04/2010

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.

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