



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Lithium General Purpose Grease

Sta-Lube Lithium
General Purpose Grease

Product Number (s): SL3310

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 Orquídea
San Luís 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

WARNING: High pressure injection under the skin may cause serious damage including local necrosis.

Appearance & Odor: Amber solid to semi-solid grease; slight hydrocarbon odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: May cause slight irritation to eyes.

SKIN: Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Symptoms include formation of black pustules and spots on the skin of exposed areas.

INHALATION: Under normal conditions of use, this is not expected to be a primary route of exposure.

INGESTION: Low toxicity if swallowed. May result in nausea, vomiting and/or diarrhea.

CHRONIC EFFECTS: Unknown

TARGET ORGANS: Unknown

Medical Conditions Aggravated by Exposure: pre-existing skin conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Heavy naphthenic distillates	64742-52-5	> 50
Proprietary additive blend	proprietary	< 45
Zinc alkyl dithiophosphate	68649-42-3	< 5

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. When using high pressure equipment, injection of the product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.
- 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:** In general no treatment is necessary unless large quantities are swallowed. If symptoms are experienced, seek medical advice.
- Note to Physicians:** Treat symptomatically. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimize tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anesthetics and wide exploration is essential.

Section 5: Fire-Fighting Measures

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

Flash Point: > 302°F / 150°C (COC)	Upper Explosive Limit: 10.0
Autoignition Temperature: > 608°F / 320°C	Lower Explosive Limit: 1.0

Fire and Explosion Data:

- Suitable Extinguishing Media:** Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a jet.
- Products of Combustion:** Smoke, carbon monoxide, unidentified organic and inorganic compounds
- 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.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8. Avoid contact with skin and eyes.

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: Avoid contact with spilled or released material. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Shovel into suitable container for disposal or reclamation.

Section 7: Handling and Storage

Handling Procedures: Avoid prolonged or repeated contact with skin. Avoid inhaling vapor or mist. Use local exhaust ventilation if there is risk of inhalation of vapors. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Store between 32 - 122°F (0 - 50°C). Keep containers closed when not in use.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Oil mist	5	NE	5	10	NE		mg/m ³
Zinc alkyl dithiophosphate	NE	NE	NE	NE	NE		
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 and particulate cartridges. 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 splash or spatter, wear splash-proof goggles.

Skin Protection: Use protective gloves such as PVC, neoprene or nitrile rubber. Contaminated gloves should be replaced. Also, use protective work 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: slight hydrocarbon
 Odor Threshold: ND
 Specific Gravity: 0.9
 Initial Boiling Point: ND
 Freezing Point: ND
 Vapor Pressure: < 0.5 Pa at 68°F / 20°C
 Vapor Density: > 1 (air = 1)
 Evaporation Rate: slow
 Solubility: Negligible in water
 Coefficient of water/oil distribution: > 6
 pH: NA
 Volatile Organic Compounds: wt %: ND g/L: ND lbs./gal: ND

Section 10: Stability and Reactivity

Stability: Stable
 Conditions to Avoid: Extremes of temperature and direct sunlight
 Incompatible Materials: Strong oxidizing agents
 Hazardous Decomposition Products: Not expected during normal storage.
 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:

<u>Component</u> grease blend	<u>Oral LD50 (rat)</u> > 5000 mg/kg	<u>Dermal LD50 (rabbit)</u> > 5000 mg/kg	<u>Inhalation LC50 (rat)</u> No data
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Chronic Toxicity:

<u>Component</u> grease blend	<u>OSHA Carcinogen</u> No	<u>IARC Carcinogen</u> No	<u>NTP Carcinogen</u> No	<u>Irritant</u> No	<u>Sensitizer</u> No
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Reproductive Toxicity: Not expected to be a hazard.
Teratogenicity: No information available.
Mutagenicity: Not considered a mutagenic hazard.
Synergistic Effects: No information available.
Additional Information: Used grease may contain harmful impurities that have accumulated during use. The concentration of such harmful impurities will depend on use and they may present risks to health and the environment on disposal. All used grease should be handled with caution.

Section 12: Ecological Information

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

Ecotoxicity: Poorly soluble mixture. May cause physical fouling of aquatic organisms.
Persistence / Degradability: Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
Bioaccumulation / Accumulation: Contains components with the potential to bioaccumulate.
Mobility in Environment: Semi-solid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Section 13: Disposal Considerations

Waste Classification: This product is not a RCRA hazardous waste as packaged. Used grease should be evaluated to determine if it contains hazardous contaminants. (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: zinc compounds

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:
zinc compounds (1.75%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): none

Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

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.

State Right to Know:

New Jersey: 68649-42-3
Pennsylvania: NA
Massachusetts: NA
Rhode Island : NA

Canadian Regulations:

Controlled Products Regulations:

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

WHMIS Hazard Class: Not regulated

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

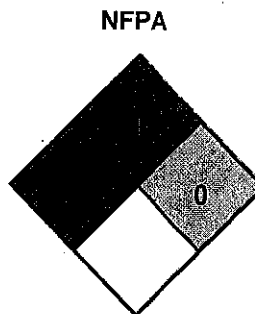
European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

Section 16: Other Information

HMIS® (II)	
Health:	0
	1
Reactivity:	0
PPE:	B



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

Prepared By: Michelle Rudnick
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Changes since last revision: Formula change

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
IARC: International Agency for Research on Cancer	PPE: Personal Protection Equipment
IATA: International Air Transport Association	ppm: Parts per Million
ICAO: International Civil Aviation Organization	RoHS: Restriction of Hazardous Substances
IMDG: International Maritime Dangerous Goods	STEL: Short Term Exposure Limit
IMO: International Maritime Organization	TCC: Tag Closed Cup
lbs./gal: pounds per gallon	TWA: Time Weighted Average
LC: Lethal Concentration	WHMIS: Workplace Hazardous Materials Information System
LD: Lethal Dose	