



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease

Product Number (s): SL3141, SL3144, SL3145, SL3146, SL3330, 8SL3141

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

As defined by OSHA's Hazard Communication Standard, this product is non-hazardous.

Appearance & Odor: Grey 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.

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Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hydrotreated heavy naphthenic distillates	64742-52-5	70 - 90
Lithium 12-hydroxystearate	7620-77-1	5 – 10
Zinc, dithiophosphate di-C1-14-alkyl esters	68649-42-3	0.5 – 1.5
Molybdenum sulfide	1317-33-5	0.2 – 1
Graphite	7782-42-5	0.2 - 1

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: > 400°F (COC)	Upper Explosive Limit: 7.0
Autoignition Temperature: ND	Lower Explosive Limit: 0.9

Fire and Explosion Data:

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

Products of Combustion: Oxides of carbon and sulfur

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

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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:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hydrotreated heavy naphthenic distillate	5*	NE	5*	10*	NE		mg/m ³
Lithium 12-hydroxystearate	NE	NE	NE	NE	NE		
Zinc, dithiophosphate di-C1-14-alkyl esters	NE	NE	NE	NE	NE		
Molybdenum sulfide	NE	NE	10	NE	NE		mg/m ³
Graphite	15**	NE	2	NE	2.5	NIOSH	mg/m ³
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated * – oil mist ** – mppcf							

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 latex or rubber. 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: grey

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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: slow
 Solubility: insoluble in water
 Coefficient of water/oil distribution: ND
 pH: NA
 Volatile Organic Compounds: wt %: 0.2 g/L: 1.8 lbs./gal: 0.015

Section 10: Stability and Reactivity

Stability: Stable
 Conditions to Avoid: None
 Incompatible Materials: Avoid contact with acids and oxidizing substances.
 Hazardous Decomposition Products: Oxides of carbon. Sulfur
 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>	<u>Oral LD50 (rat)</u>	<u>Dermal LD50 (rabbit)</u>	<u>Inhalation LC50 (rat)</u>
Hydrotreated heavy naphthenic distillate	> 5000 mg/kg	> 2000 mg/kg	2.18 mg/L/4H
Lithium 12-hydroxystearate	No data	No data	No data
Zinc, dithiophosphate di-C1-14-alkyl esters	No data	No data	No data
Molybdenum sulfide	No data	No data	> 2820 mg/m ³ /4H
Graphite	No data	No data	No data

Chronic Toxicity:

<u>Component</u>	<u>OSHA Carcinogen</u>	<u>IARC Carcinogen</u>	<u>NTP Carcinogen</u>	<u>Irritant</u>	<u>Sensitizer</u>
Hydrotreated heavy naphthenic distillate	No	No	No	Unknown	Unknown
Lithium 12-hydroxystearate	No	No	No	Unknown	Unknown
Zinc, dithiophosphate di-C1-14-alkyl esters	No	No	No	Unknown	Unknown
Molybdenum sulfide	No	No	No	E (mild) / S (mild) / R (mild)	Unknown
Graphite	No	No	No	E (mild) / S (mild) / R (mild)	Unknown

E – Eye	S – Skin	R - Respiratory
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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

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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 (< 1.5%)

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

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:

New Jersey: 1317-33-5
Pennsylvania: 7782-42-5
Massachusetts: 1317-33-5, 7782-5
Rhode Island : 7782-42-5

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: Not Regulated

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

European Union Regulations:

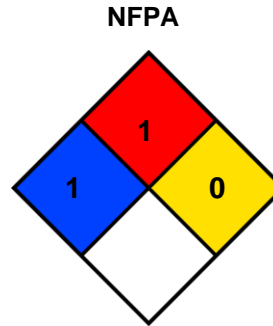
RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

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Section 16: Other Information

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



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

Prepared By: Michelle Rudnick
CRC #: 2127
Revision Date: 07/29/2011

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.

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| 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 | |