

Safety Data Sheet



SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product: Multi-Purpose EP2 Lithium Grease
CAS Registry Number: Not applicable for mixtures
Synonyms: Multi-purpose Lithium Grease NLGI-2, Lithium EP-2, Gard Multi-purpose EP2 Lithium Grease
Generic/Chemical Name: Petroleum hydrocarbon fluid
Product Type: Lubricating grease

Martin Lubricants; A Division of Martin Operating Partnership L.P. 484 East 6 th Street Smackover, AR 71762 USA	Emergency: Information: Fax:	ChemTrec 800-424-9300 870-881-8700 870-864-8656 www.martinlubricants.com
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SECTION 2 HAZARDS IDENTIFICATION

WARNING:

- KEEP OUT OF REACH OF CHILDREN
- MAY CAUSE EYE IRRITATION
- MAY CAUSE SKIN IRRITATION
- HOT VAPORS MAY CAUSE RESPIRATORY IRRITATION

	NPCA-HMIS	KEY
HEALTH:	0	0 = Minimal
FIRE:	1	1 = Slight
REACTIVITY:	0	2 = Moderate
SPECIFIC HAZARD:	N/A	3 = Serious
PROTECTION INDEX:	B	4 = Severe

Eye Contact: Avoid prolonged contact with the eyes, which may cause mild eye discomfort, tearing or blurring of vision. Based on data from similar materials.

Skin Contact: Prolonged or repeated contact may lead to an allergic skin sensitization in some people and dermatitis (dryness, chapping and reddening of skin). Based on component data and data from similar materials.

Inhalation: Overexposure by inhalation of hot material may cause nonspecific discomfort, such as nausea, headache or weakness.

Ingestion: Do not ingest. Due to the expected concentration of oil (70-100%) ingestion is expected to be relatively non-toxic unless lung aspiration occurs. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. This product has laxative properties and may result in abdominal cramps and diarrhea.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	%	ACGIH TWA	OSHA PEL	OSHA STEL	SKIN
Severely hydro-treated mineral oil mixture	Mixture	85 - 95	5 mg/m ³ (oil mist)	5 mg/m ³ (oil mist)	10 mg/m ³ (oil mist)	NO
Proprietary additives and thickeners	Mixture	5 - 15	5 mg/m ³ (oil mist)	5 mg/m ³ (oil mist)	10 mg/m ³ (oil mist)	NO

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There are no additional ingredients present which the current knowledge and in concentration applicable, are classified as hazardous to health or environment and hence require reporting in this section.

ABBREVIATIONS:

NE: None Established NA: Not Applicable (1): NIOSH Guidelines (2) "Manufacturer Recommendation" Short Term Exposure Limit ND: Not Determined

SECTION 4 FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists call a physician. If material is hot, treat for thermal burns and take victim to hospital immediately.
Skin Contact:	Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately. Wash contaminated clothing before reuse.
Inhalation:	If overcome by inhalation of hot vapors, remove to fresh air. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.
Ingestion:	DO NOT INDUCE VOMITING. Do not induce vomiting due to aspiration hazard. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Should vomiting occur; lower head below knees to avoid aspiration. Seek immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point:	Min. 235°C (455°F) by Cleveland Open Cup, ASTM D 92
Upper Flammable Limit:	Not determined
Lower Flammable Limit:	Not determined
Extinguishing Media:	Use dry chemical, foam, water fog or carbon dioxide
Special Fire Fighting Procedures:	Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.
Unusual Fire and Explosion Hazards:	Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. Heavy flammable vapors may settle along ground level and low spots to create an invisible fire hazard. The vapors may extend to sources of ignition and flash back.
By-products of Combustion:	Oxides of Li, C, Ca and S. Additional byproducts include hydrogen sulfide, alkyl mercaptan and other sulfides
Auto-ignition Temperature:	Not determined
Explosion Data:	Not determined. Care should always be exercised in dust/mist areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

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Spill Procedures (Land):	Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames and heaters). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels or buckets and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities.
Spill Procedures (Water):	Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities.
Waste Disposal Method:	All disposals must comply with federal, state and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation regulations may apply for transporting this material when spilled. See Section 14. CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

SECTION 7 HANDLING AND STORAGE

Handling Procedures:	Keep containers closed when not in use. Keep out of reach of children.
Storage Procedures:	Store containers away from heat, sparks, open flame or oxidizing materials.
Additional Information:	No additional information.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection:	Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance and cleanup/spill control personnel.
Respiratory Protection:	None required if airborne concentrations are maintained below threshold limits listed on page 1. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air- purifying respirator.
Eye Protection:	Eye protection is always recommended. If material is handled such that it could be splashed into the eyes, wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).
Hand Protection:	Impervious gloves such as neoprene or Nitrile® rubber to avoid skin sensitization and absorption.
Other Protection:	Use of an apron and over-boots of chemically impervious materials such as neoprene or Nitrile® rubber is recommended to avoid skin sensitization. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials, which cannot be decontaminated.
Local Control Measures:	Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.

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Other: Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure: Negligible at STP (Standard Temperature and Pressure, 25°C at 1 ATM)

Gravity by ASTM D 1298:

Specific Gravity @ 15.6°C	0.8700
Density @ 15.6°C	-

Solubility Slight

Vapor Density, Air = 1: >1 mm at STP

Evaporation Rate, n-Butyl Acetate = 1: Negligible at STP

Odor: Slight petroleum hydrocarbon odor

Appearance: Blue, translucent semi-solid

Boiling Point: Not determined.

Molecular Weight: Not determined.

SECTION 10 STABILITY AND REACTIVITY

Stability: Material is stable at room temperature and pressure.

Conditions To Avoid: Avoid high temperatures and product contamination.

Incompatibility With Other Materials: Avoid contact with acids and oxidizing materials.

Decomposition Products: Smoke, carbon monoxide and dioxide and other aldehydes of incomplete combustion. Oxides of Li, Ca, C and S. Hydrogen sulfide and alkyl mercaptans and other sulfides may be released.

Hazardous Polymerization: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Oral Toxicity: Not determined.

Dermal Toxicity: See section 16 "Other Information" ADVICE TO PHYSICIANS

Inhalation Toxicity: On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.

Dermal Sensitization: Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.

Chronic Toxicity: Not determined.

Carcinogenicity: Not determined.

Mutagenicity: Not determined.

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Reproductive Toxicity:	Not determined
Teratogenicity:	Not determined
Other:	This product contains petroleum base oils, which may be refined by various processes including severe solvent extraction, severe hydro-cracking or severe hydro-treating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicity:	This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.
Environmental Fate:	No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal:	Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.
Disposal Consideration:	Place used, contaminated or excess material into disposable containers and dispose of in a manner consistent with local and state regulations. Contact local environmental or health authorities for approved disposal of this material. Most used oil is reclaimed or incinerated.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT Information

Bulk Shipping Description:	Does not apply to bulk oil shipping.
Non-Bulk Shipping Description:	Does not apply to non-bulk oil shipping.
Identification Number:	Not applicable
Hazard Classification:	Not applicable
Other:	See 49 CFR for additional requirements for descriptions, allowed modes of transport and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

IMDG Information This material is not classified as dangerous under IMDG regulations.

IATA Information This material is not classified as dangerous under IATA regulations.

SECTION 15 REGULATORY INFORMATION

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Clean Water Act/Oil Pollution Act:

Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spills or discharges that produce a visible sheen or film on surface of water or in waterways, ditches or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

TSCA:

All components of this material are listed in the U.S. TSCA Inventory.

Other TSCA:

Not applicable.

SARA Title III:

Section 302/304 Extremely Hazardous Substances: None

Section 311/312 Hazard Categorization:

Acute (immediate health effects): Yes

Chronic (delayed health effects): No

Fire (hazard): No

Reactivity (hazard): No

Pressure (sudden release hazard): No

Section 313 Toxic Chemicals: None

CERCLA:

For stationary sources - reportable quantity: Not determined.

Due to: Not applicable.

For moving sources - reportable quantity: Not determined.

Due to: Not applicable.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

California Prop. 65:

Not applicable.

SECTION 16

OTHER INFORMATION

Advise to Physicians:

High velocity injection of grease under the skin may result in serious injury. If left untreated, the affected area is subject to infection, disfigurement, lack of blood circulation and may require amputation. When dispensed by high-pressure equipment, this material can easily penetrate the skin and leave a bloodless puncture wound. Material injected into a finger can be deposited into the palm of the hand and in rare occasions up to the elbow. Within 24 to 48 hours the patient may experience swelling, discoloration and throbbing pain in the affected area. Immediate treatment by a surgical specialist is recommended.

Glossary:

ACGIH – American Conference of Governmental Industrial Hygienists; **ANSI** – American National Standards Institute; **Canadian TDG** – Canadian Transportation of Dangerous Goods; **CAS** – Chemical Abstract Service; **Chemtrec** – Chemical Transportation Emergency Center (US); **CHIP** – Chemical Hazard Information and Packaging; **DSL** – Domestic Substances List; **EC** – Equivalent Concentration; **EH40 (UK)** – HSE Guidance Note EH40 Occupational Exposure Limits; **EPCRA** – Emergency Planning and Community Right-To-Know Act; **HMIS** – Hazardous Material Information Service; **LC** – Lethal Concentration; **LD** – Lethal Dose; **NFPA** – National Fire Protection Association; **OEL** – Occupational Exposure Limits; **OSHA** – Occupational Safety and Health Administration, US Department of Labor; **PEL** – Permissible Exposure Limit; **SARA (Title III)** – Superfund Amendments and Reauthorization Act; **SARA 313** – Superfund Amendments and Reauthorization Act, Section 313; **SCBA** – Self-Contained Breathing Apparatus; **STEL** – Short Term Exposure Limit; **TLV** – Threshold Limit Value;

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TSCA – Toxic Substances Control Act Public Law 94-469; **TWA** – Time Weighted Value; **US DOT** – US Department of Transportation; **WHMIS** – Workplace Hazardous Materials Information System.

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This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Martin Lubricants; A Division of Martin Operating Partnership L.P., must rely upon information provided by the material manufacturers or distributors.

Prepared by: David Collins
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Safety Data Sheet conforms to ANSI Z400.1-2004 Standard - United States