

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Multi-Purpose Lithium Grease

Product Numbers: 11300, 11302, 11312, 11315, 11316, 11328

Synonyms: Grease, Lubricant

1.2. Intended Use of the Product

Grease

1.3. Name, Address, and Telephone of the Responsible Party

Supplier Highline Warren LLC

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Not Classified

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) : Not Classified

Signal Word (GHS-US) : No Signal Word

Hazard Statements (GHS-US) : None Required

Precautionary Statements (GHS-US) : P273 - Avoid release to the environment.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

None noted

2.4. Unknown Acute Toxicity (GHS-US)

None of the mixture consists of ingredient(s) of unknown acute toxicity.

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Petroleum distillates, solvent dewaxed	(CAS No) 64742-65-0	60 – 75, 70 - 85	Not Classified
Lithium Hydroxide, Monohydrate	(CAS No) 1310-66-3	<2	H314: Skin Corr, 1B H302: Acute Toxicity, 4
Castor Oil, Hydrogenated; Mainly 12-HydrostERIC Acid, Triglycerides	(CAS No) 8001-78-3	8 - 18	Not Classified
12-Hydroxystearic Acid	(CAS No) 106-14-9	2 - 10	Not Classified
Molybdenum Disulfide	(CAS No.) 1317-33-5	1-5	Not Classified
Sebacic Acid	(CAS No) 111-20-6	<3	Not Classified

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: No treatment necessary under normal conditions of use. If symptoms persist, remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea. Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible). 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.

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable but will support combustion.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

Other Information: Refer to Section 9 for flammability properties.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong oxidizing agents.

7.3. Specific End Use(s)

Grease

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Mineral Oils		
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
USA ACGIH	ACGIH STEL	10 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
Canada	OEL STEL (mg/m ³)	10 mg/m ³
Canada	OEL TWA (mg/m ³)	5 mg/m ³

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye Protection: If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and Body Protection: Skin protection is not ordinarily required beyond standard work clothes. It is good practice to wear chemical resistant gloves.

Respiratory Protection: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for the combination of organic gases and vapors [Type A/Type P boiling point >65°C (149°F)].

Environmental Exposure Controls: Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties: See Product Data Sheet for Grade Specifics

Physical State	: Semi-Solid At Room Temperature
Appearance	: Black
Odor	: Slight Hydrocarbon
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: > 300°C estimated
Boiling Point	: Not available
Flash Point	: Typical 150 °C (COC) (302 °F)
Auto-ignition Temperature	: > 320°C / 608°F
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Explosion Limit	: Typical 1% (V)
Upper Explosion Limit	: Typical 10% (V)
Vapor Pressure	: 0.5 Pa (20°C / 68°F) typical
Relative Vapor Density at 20 °C	: > 1 estimated
Relative Density	: 1.000
Specific Gravity	: 1.000 kg/m ₃
Solubility	: Negligible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Kinematic	: Not available
Explosive Properties	: Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Reacts with strong oxidizing agents.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. Incompatible Materials:** Strong oxidizing agents.
- 10.6. Hazardous Decomposition Products:** Not expected to form during normal storage.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Oral Toxicity: LD50 (rat): > 5,000 mg/kg Remarks: Expected to be of low toxicity:

Acute Inhalation Toxicity: Remarks: Not considered to be an inhalation hazard under normal conditions of use.

Acute Dermal Toxicity: LD50 (Rabbit): > 5,000 mg/kg Remarks: Expected to be of low toxicity.

Skin Corrosion/Irritation: Remarks: Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Eye Damage/Irritation: Expected to be slightly irritating.

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause irritation.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not Classified

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data: Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology – General:

Toxicity to fish (Acute toxicity) : Remarks: Expected to be practically nontoxic: LL/EL/IL50 > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) : Remarks: Expected to be practically nontoxic: LL/EL/IL50 > 100 mg/l

Toxicity to algae (Acute toxicity) : Remarks: Expected to be practically nontoxic: LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Data not available

Toxicity to bacteria (Acute toxicity) : Remarks: Data not available

12.2. Persistence and Degradability

Remarks: Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment.

12.3. Bioaccumulative Potential

Remarks: Contains components with the potential to bioaccumulate.

12.4. Mobility in Soil

Remarks: Semi-solid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile.

Remarks: Floats on water.

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

From Residues: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.

From Packaging: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

Lithium Grease

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Version: Lithium.001

SECTION 15: REGULATORY INFORMATION

OSHA Hazards : No OSHA Hazards

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ. Smitty's Supply classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

New Jersey Right To Know: No chemicals in this material are subject to reporting.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

EINECS : All components listed or polymer exempt.

TSCA : All components listed.

DSL : All components listed.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 11/15/2017

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

NFPA Rating (Health, Fire, Reactivity): 0, 1, 0

GHS Full Text Phrases:

H314	Causes severe skin burns and eye damage.
H302	Harmful if swallowed.
P273	Avoid release into the environment.
P501	Dispose of contents/container in accordance with local, regional, national, and international regulations.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2