

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Permaplex NLGI
Product Description: Lubricating Grease
Product Use: Lubricating Grease

Company Identification
D-A Lubricant Company, Inc
801 Edwards Dr.
Lebanon, IN 46052

Phone: (317) 923-5321
Chemical Emergency Hotline: (800) 899-9004

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

| COMPONENTS | CAS NUMBER | AMOUNT |
|----------------------------------|------------|------------|
| Highly Refined Mineral Oil | Mixture | >50%weight |
| Molybdenum Disulfide | 01317-33-5 | 1 - 5% |
| Barium Tallow Fatty Acid Complex | 68201-19-4 | 20 – 50% |
| Barium Sulfonate | 25619-56-1 | 1 - 5% |
| Zinc Naphtenate | 12001-85-3 | 1 - 5% |

This product can contain any of the following highly refined petroleum base stocks:

| | | |
|------------|------------|------------|
| 64742-32-1 | 64742-52-5 | 64741-96-4 |
| 64742-62-7 | 64742-65-0 | 64741-95-3 |
| 8052-42-4 | | |

SECTION 3 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see MSDS Section 15).

POTENTIAL HEALTH EFFECTS

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

| | | | |
|------------------------|-----------|-----------------|---------------|
| NFPA Hazard ID: | Health: 1 | Flammability: 1 | Reactivity: 0 |
| HMIS Hazard ID: | Health: 1 | Flammability: 1 | Reactivity: 0 |

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 4 FIRST AID MEASURES

Eye: Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention. If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses, if worn. Get immediate medical attention.

Skin: Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool in water. See a doctor for extensive burns.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, sulfur oxides and unidentified organic compounds will be evolved when this material undergoes combustion.

FLAMMABILITY PROPERTIES

Flash Point [Method]: >215C (419F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. U.S. regulations require reporting releases of this material to the environment which exceed the reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800) 899-9004.

SPILL MANAGEMENT

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool before proceeding with disposal methods.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7

HANDLING AND STORAGE

HANDLING

Avoid contact with used product. Prevent small spills and leakage to avoid slip hazard.

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions: For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death

Static Accumulator: This material is a static accumulator.

STORAGE

Do not store in open or unlabelled containers.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits. Use in a well-ventilated area

PERSONAL PROTECTION

Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective

equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted. If this material is heated, wear chemical goggles or safety glasses or a face shield.

Skin Protection: Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Nitrile Rubber, Silver Shield, Viton. If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate to prevent skin contact.

Respiratory Protection: No respiratory protection is normally required. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

| Component | Limit | TWA | STEL | Ceiling | Notation |
|----------------------------|-----------|---------|----------|---------|----------|
| Highly refined mineral oil | ACGIH_TLV | 5 mg/m3 | 10 mg/m3 | | |
| Highly refined mineral oil | OSHA_PEL | 5 mg/m3 | | | |

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

Attention: the data below are typical values and do not constitute a specification.

Color: Black

Physical State: Semi-solid

Odor: Petroleum hydrocarbon

pH: NA

Vapor Pressure: <0.013 kPa (0.1 mm Hg) at 20C

Vapor Density (Air = 1): ND

Boiling Point: >500F / 260C

Flash Point: >419F / 215C

Solubility: Negligible.

Freezing Point: ND

Specific Gravity: 0.85-0.95 at 60 °F

Evaporation Rate: NDA

SECTION 10

STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose under normal storage conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Basis for Assessment : Information given is based on data on the components and the toxicology of similar products.

Acute Oral Toxicity : Expected to be of low toxicity: LD50 > 5000 mg/kg

Acute Dermal Toxicity : Expected to be of low toxicity: LD50 > 5000 mg/kg

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

Skin Irritation : 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 Irritation : Expected to be slightly irritating.

Respiratory Irritation : Inhalation of vapors or mists may cause irritation.

Sensitization : Not expected to be a skin sensitizer.

Repeated Dose Toxicity : Not expected to be a hazard.

Mutagenicity : Not considered a mutagenic hazard.

Carcinogenicity : Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.

Reproductive and Developmental Toxicity: Not expected to be a hazard.

Additional Information: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

Continuous contact with used engine oils has caused skin cancer in animal tests

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

Ecotoxicity: No data available

Environmental Fate: Not expected to be inherently biodegradable

Mobility: Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Bioaccumulation: Has the potential for bioaccumulation, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Material Disposal: 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.

Container Disposal: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

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| SECTION 14 | TRANSPORT INFORMATION |
|-------------------|------------------------------|

LAND (DOT) : Not Regulated for Land Transport

LAND (TDG) : Not Regulated for Land Transport

SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA) : Not Regulated for Air Transport

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| SECTION 15 | REGULATORY INFORMATION |
|-------------------|-------------------------------|

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

TSCA: All components of this product are listed on the USA TSCA chemical inventory

EPCRA: This material contains no extremely hazardous substances.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

SARA (313) TOXIC RELEASE INVENTORY:
None

CALIFORNIA PROPOSITION 65: This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

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| SECTION 16 | OTHER INFORMATION |
|-------------------|--------------------------|

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant Company, Inc. disclaims any and all liability or legal responsibility for use or reliance upon same.