# SAFETY DATA SHEET

**Date: 06/23/2023**

## SECTION 1 - IDENTIFICATION

**GHS Product Identifier:** Mechanical Vacuum Pump Oil

**Synonyms:**

Highly-Refined Petroleum Lubricant Oil

**Supplier's Details:**

Ladd Research
3 Ewing Place
Williston, VT 05495
Phone: (802) 658-4961

**Telephone Number:** Emergency Contact: +1-703-741-5500 (Chemtrec)

## SECTION 2 – HAZARDS IDENTIFICATION

**OSHA/HCS status:** While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the Substance or mixture:** Not classified.

**GHS label elements**

**Signal word:** No signal word.

**Hazard statements:** No known significant effects or critical hazards.

**Precautionary statements**

**General:** Avoid contact with eyes, skin and clothing. MAY BE HARMFUL IF SWALLOWED. IF IN EYES: Rinse cautiously with water for several minutes. Do NOT induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.

**Prevention:** Not applicable.

**Response:** Not applicable.

**Storage:** Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.

**Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified:** None known.

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/mixture:** Substance

**Other means of Identification:** Lubricating oil

**CAS number/other identifiers**
**CAS number:** Not available

| Ingredient name | % | CAS number |
|---|---|---|
| Distillates (petroleum), hydro treated heavy paraffinic | 100 | 64742-54-7 |

* = Various ** = Mixture *** = Proprietary
Any concentration shown as a range is to protect confidentiality or is due to process variation.
**Occupational exposure limits, if available, are listed in Section 8.**

## SECTION 4 - FIRST AID MEASURES

**Description of necessary first aid measures**

**Eye contact:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute**
**Potential acute health effects**

**Eye contact:** No known significant effects or critical hazards.
**Inhalation:** No known significant effects or critical hazards.
**Skin contact:** No known significant effects or critical hazards.
**Ingestion:** No known significant effects or critical hazards.

**Over-exposure signs/symptoms**
**Eye contact:** No specific data.
**Inhalation:** No specific data.
**Skin contact:** No specific data.
**Ingestion:** No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
**Specific treatments:** Treat symptomatically and supportively.

## SECTION 4 - FIRST AID MEASURES CONTINUED

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training.

**See toxicological information (Section 11)**

## SECTION 5 - FIRE FIGHTING MEASURES

**Specific hazards arising from the chemical:** In a fire or if heated, a pressure increase will occur and the container may burst.

**Extinguishing media**

**Suitable extinguishing Media:** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing Media:** None known.

**Hazardous thermal decomposition products:** No specific data.

**Special protective actions for fire-fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency Personnel:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders:** If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

**Environmental precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## SECTION 6 - ACCIDENTAL RELEASE MEASURES CONTINUED

**Methods and materials for containment and cleaning up**

**Small spill:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill:** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling**

**Protective measures :** Put on appropriate personal protective equipment (see Section 8).

**Advice on general occupational hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, Including any incompatibilities:** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Control parameters**

**Occupational exposure limits**

| Ingredient name | Exposure limits |
|---|---|
| Distillates (petroleum), hydro treated heavy paraffinic | **ACGIH TLV (United States, 6/2013).**<br>TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction<br>**ACGIH (United States).**<br>TWA: 5 mg/m³ 8 hours.<br>STEL: 10 mg/m³ 15 minutes.<br>**OSHA (United States).**<br>TWA: 5 mg/m³ 8 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 5 mg/m³ 8 hours. |

**Appropriate engineering controls:** Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure Controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection:** Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection**

**Hand protection:** Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION CONTINUED

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection:** Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Physical state:** | Liquid. |
| **Color:** | Light amber |
| **Odor:** | Mild petroleum odor |
| **Ph:** | Not available. |
| **Boiling point:** | Not available. |
| **Flash point:** | Open cup: 244°C (471.2°F) [Cleveland.] |
| **Lower and upper explosive (flammable) limits:** | Not available |
| **Vapor pressure:** | <0.0013 kPa (<0.01 mm Hg) [room temperature] |
| **Vapor density:** | Not available. |
| **Relative density:** | 0.88 |
| **Density lbs/gal:** | 7.2 lbs/gal |
| **Gravity, °API:** | 32.3 |
| **Viscosity:** | Kinematic (40°C (104°F)): 0.68 $cm_2/s$ (68 cSt) |
| **Viscosity SUS:** | 340 SUS @100 F |

## SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

**Chemical stability:** The product is stable.

**Possibility of hazardous Reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid:** No specific data.

**Incompatible materials:** No specific data.

**Hazardous decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Distillates (petroleum), Hydro treated heavy paraffinic | LD50 Oral | Rat | >5000 mg/kg | - |

**Conclusion/Summary:** **Distillates (petroleum), hydrotreated heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

### Irritation/Corrosion

**Skin:** No additional information.
**Eyes:** No additional information.
**Respiratory:** No additional information.

### Sensitization

**Skin:** No additional information.
**Respiratory:** No additional information.

### Mutagenicity
**Conclusion/Summary:** No additional information.

### Carcinogenicity
**Conclusion/Summary:** No additional information.

### Reproductive toxicity
**Conclusion/Summary:** No additional information.

### Teratogenicity
**Conclusion/Summary:** No additional information.

### Specific target organ toxicity (single exposure)
Not available.

### Specific target organ toxicity (repeated exposure)
Not available.

### Aspiration hazard
Not available.

## SECTION 11 – TOXICOLOGICAL INFORMATION CONTINUED

**Information on the likely routes of exposure:** Not available.

**Potential acute health effects**

**Eye contact:** No known significant effects or critical hazards.
**Inhalation:** No known significant effects or critical hazards.
**Skin contact:** No known significant effects or critical hazards.
**Ingestion:** No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact:** No specific data.
**Inhalation:** No specific data.
**Skin contact:** No specific data.
**Ingestion:** No specific data.

**Potential chronic health effects**

**General:** No known significant effects or critical hazards.
**Carcinogenicity:** No known significant effects or critical hazards.
**Mutagenicity:** No known significant effects or critical hazards.
**Teratogenicity:** No known significant effects or critical hazards.
**Developmental effects:** No known significant effects or critical hazards.
**Fertility effects:** No known significant effects or critical hazards.

## SECTION 12 – ECOLOGICAL INFORMATION

**Toxicity**
**Conclusion/Summary:** Not available

**Persistence and degradability**
**Conclusion/Summary:** Not available

**Bio accumulative potential**
Not available

**Mobility in soil**
**Soil/water partition coefficient ($K_{OC}$):** Not available

**Other adverse effects:** No known significant effects or critical hazards.

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Disposal methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14 – TRANSPORT INFORMATION

| | DOT Classification | IMDG | IATA |
|---|---|---|---|
| **UN number** | Not regulated | Not regulated | Not regulated |
| **UN proper shipping name** | - | - | - |
| **Transport hazard class(es)** | - | - | - |
| **Packing group** | - | - | - |
| **Environmental hazards** | No | No | No |
| **Additional information** | - | - | - |

**Special precautions for user:** **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not available.

## SECTION 15 – REGULATORY INFORMATION

**U.S. Federal regulations:** **United States inventory (TSCA 8b)**: All components are listed or exempted.
This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

**SARA 302/304**

**Composition/information on ingredients**

**SARA 304 RQ:** Not applicable.

## SECTION 15 – REGULATORY INFORMATION CONTINUED

**SARA 311/312**

**Classification:** Not applicable.

**Composition/information on ingredients**

**State regulations**

**Massachusetts:** None of the components are listed.
**New York:** None of the components are listed.
**New Jersey:** None of the components are listed.
**Pennsylvania:** None of the components are listed.

**International regulations**

**International lists:**

**Australia inventory (AICS)**: All components are listed or exempted.
**China inventory (IECSC)**: All components are listed or exempted.
**Japan inventory**: All components are listed or exempted.
**Korea inventory**: All components are listed or exempted.
**Malaysia Inventory (EHS Register)**: All components are listed or exempted.
**New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
**Philippines inventory (PICCS)**: All components are listed or exempted.
**Taiwan inventory (CSNN)**: Not determined.

**Canada inventory:** All components are listed or exempted.
**EU Inventory:** All components are listed or exempted.
**WHMIS (Canada):** Not controlled under WHMIS (Canada).

## SECTION 16 – OTHER INFORMATION

**National Fire Protection Association (U.S.A.)**


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# SAFETY DATA SHEET

## SECTION 16 – OTHER INFORMATION CONTINUED



**History**

**Date of issue/Date of Revision:** 06/23/2023

**Key to abbreviations:**

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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