



**WARCO PREMIUM LUBRICANTS
MATERIAL SAFETY DATA SHEET
WARCO POWER STEERING FLUID**

1 of 6

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| Any Questions Call: Warco Products, Inc. 18400 SW Teton Ave. Tualatin, OR 97062 USA Tel: (503) 612 0882 | Emergency Telephone: (24 HOURS) CHEMTREC (800) 424 9300 | NFPA/HMIS Hazard Code | |
| | | 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant | Health=0/0 Fire=1/1 Reactivity=0/0 Personal Protection Index: NA |

I. Ingredients/Identification Information

| Components (Specific Chemical Identity: Common Name(s)) | CAS Number |
|---|------------|
| Solvent Dewaxed, Heavy Paraffinic Distillate | 64742-65-0 |
| Solvent Dewaxed Residual Oil | 64742-62-7 |
| Solvent Refined Residuum | 64742-01-4 |
| Hydrotreated Middle Naphthenic, Distillate | 64742-46-7 |
| Hydrotreated Paraffinic Base Oil | 64742-58-1 |
| Hydrotreated Residual Oils (Petroleum) | 64742-57-0 |
| Solvent Refined, Heavy Paraffinic Distillate | 64741-88-4 |
| Solvent Refined, Light Paraffinic Distillate | 64741-89-5 |
| Hydrotreated Heavy Paraffinic Distillate | 64742-54-7 |
| Hydrotreated Light Paraffinic Distillate | 64742-55-8 |
| Hydrotreated Neutral Lubricating Oil | 72623-87-1 |
| Hydrotreated Bright Stock Lubricating Oil | 72623-83-7 |

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| Synonyms: | Power steering fluid, Lubricating Oils |
| Chemical Name: | Mixture |
| Chemical Family: | Petroleum Hydrocarbon; Blend Stock |

II. Physical/Chemical Characteristics

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|--------------------------------|---|----------------------------------|----------------------------------|
| Boiling Point: | Not Determined | Specific Gravity (H2O=1) | .86 - .88 @ 60°F |
| Vapor Pressure: (mm Hg) | Negligible | Vapor Density (Air=1) | > 1 g/ml Air = 1 |
| Solubility in Water | Negligible | Flash Point (Method Used) | >374°F, 190°C (COC, ASTM D92) |
| Appearance and Odor: | Red liquid; Lube Oil Odor | | |
| Shipping Information | Shipping Name | Petroleum Lubricating Oil | |
| | Hazard Class | Non-hazardous liquid | |
| | UN Number | Not Applicable | |
| | Proper Shipping Name | Not Applicable | |
| | Hazard Label | Not Applicable | |
| Handling and Storage: | Reportable Quantity | Not Applicable | |
| | To avoid product degradation, water contamination should be avoided and minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures (>200 F) should be minimized. Product degradation may increase health hazard risks. | | |



**WARCO PREMIUM LUBRICANTS
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2 of 6

Fire and Explosion Hazards

Slightly combustible: OSHA/NFPA Class-IIIB Combustible liquid. When heated above its flash point, this material will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to an ignition source. Mists or sprays may be flammable at temperatures below the normal flash point. Keep away from extreme heat and open flame.

Fire Extinguishing Media

Dry chemical and carbon dioxide. Foam and water fog are effective but cause frothing.

Special Firefighting Procedures

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind to the fire, respiratory protective equipment must be worn. Cool tanks and container exposed to fire with water. Burning liquid will float on water. Notify appropriate authorities if liquid enters sewer/waterways.

III. Health Hazards

Summary of Acute Hazards

Not expected to present a significant health hazard upon short-term exposure

Route of Exposure

Signs and Symptoms

Inhalation

Not expected to be toxic by inhalation. However, breathing mineral oil mist at levels above the TLV may cause respiratory irritation and possible discomfort. Elevated mists concentrations above applicable workplace exposure levels may cause lung damage. Incidental mists/vapors are the **Major Route of Entry**.

Eye Contact

Flush thoroughly with water. This product can cause mild, transient, eye irritation with short-term contact with liquid or sprays. If irritation occurs, call a physician.

Skin Absorption

No significant adverse health effects are expected to occur upon short-term exposure

Skin Irritation

Material expected to cause no more than minor skin irritation following prolonged and/or repeated contact. Wash contact areas with soap and water.

Ingestion

Generally of a low order of toxicity. Not expected to be a problem when ingested. Upon ingestion of large quantities, slight gastrointestinal discomfort, diarrhea and headache may occur. Small doses may produce irritation and/or diarrhea. If aspirated into the lungs, liquid can cause severe lung damage or death. If uncomfortable seek medical assistance.

Chronic Hazards

Prolonged and/or repeated contact with this material may produce skin irritation and inflammation.

Special Health Effects

Injection Injuries - Subcutaneous injection is a medical emergency. Seek **medical** attention immediately. Inadequate treatment can



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WARCO POWER STEERING FLUID**

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| | result in ischemia and gangrene. Early symptoms may be minimal. |
| Emergency and First Aid Procedures | |
| Inhalation | If respiratory discomfort or irritation occurs due to inhalation of oil mist, move person to fresh air. Vaporization is not expected at ambient temperatures. Contact a physician immediately if illness or adverse symptoms develop |
| Eye Contact | Immediately flush eyes with a large amount of cool, clean, low-pressure water while occasionally lifting and lowering eyelids. If irritation or adverse symptoms continues, seek medical attention. |
| Skin Contact | Remove contaminated clothing and wash affected skin area thoroughly with soap and water. Launder soiled clothing. If skin irritation develops or persists, seek medical attention. |
| Ingestion | If material is swallowed and adverse symptoms develop, seek medical attention immediately. Induce vomiting only upon the advice of a physician. Never give anything by mouth to a person who is not fully conscious. If spontaneous vomiting is about to occur, place victim's head below knees. Upon ingestion, there is a low to moderate risk of aspiration. Careful gastric lavage may be considered to evacuate large quantities of material. |
| Injection Injuries | Subcutaneous injection is a medical emergency. Seek medical attention immediately. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal. |
| Chronic Hazards | Prolonged and/or repeated contact with this material may produce skin irritation and inflammation. |

IV. Protective Equipment and Other Control Measures

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| Respiratory | Not applicable for intended use. However, if unusual operating conditions create mist concentrations in excess of the TLV, an approved NIOSH/MSHA respirator is recommended. |
| Eye | Chemical face shield or protective goggles can reduce the possibility of accidental eye contact. |
| Skin | Impervious protection gloves can minimize skin exposures where prolonged or repeated exposures can occur. |
| Engineering Controls | Use adequate ventilation to keep oil mists of this material below applicable standard(s). |
| Other Hygienic and Work Practices | This is a general recommendation based upon general information as to normal uses and conditions. However when special or unusual uses or conditions exist, it is suggested that an expert assistance of an industrial hygienist be sought for special equipment. |



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VI. Spill, Disposal and Regulatory Information

Precautions if Material is Spilled or Released

Contain spill and prevent it from entering all water bodies, if possible. Safely stop flow of spill. Evacuate non-essential personnel from immediate spill area due to slipping hazards. In urban area, cleanup as soon as possible. In natural environments, cleanup on advice from ecologists. This material will float on water. Absorbent materials and pads can be used. Comply with all applicable laws. Spills may need to be reported to the National Response Center (800 424 8802). The spilled material and any soil or water which it has contacted may be hazardous to animal/aquatic life.

Waste Disposal Methods

Maximize product recovery for reuse or recycling. Conditions of use may cause this material to become a "hazardous waste," as defined by state or federal laws. Use approved treatment, transporters, and disposal sites in compliance with all applicable laws. If spill is introduced into a waste water treatment system, chemical and biodegradable if gradually exposed to microorganisms. Potential treatment and disposal methods include land farming, incineration and land disposal, if permitted.

Transportation Classifications

U.S. Department of Transportation (DOT)

| | |
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| Hazard Class | Non-regulated |
| Shipping Name | Petroleum Lubricant |
| Identification Number | Not applicable |



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Regulatory Information

**Comprehensive Environmental Response, Compensation and Liability Act
(CERCLA) Section 102 Hazardous Substances**

As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance.

Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 313 - Toxic Chemicals

This product does contain toxic chemicals of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

| <u>Components</u> | <u>CAS#</u> | <u>Concentration %</u> |
|-------------------|-------------|------------------------|
| Zinc Compounds | 68649-42-3 | <2 |

Section 311/312 - Hazard Categories

This product may meet one or more of the criteria for the hazard categories defined in 40 CFR Part 370 as established by Sections 311 and 312 of SARA as indicated below.

| | | | |
|-----------------------------------|-----------|-----------------|-----------|
| Immediate (Acute) Health Hazard | <u>No</u> | Fire Hazard | <u>No</u> |
| Delayed (Chronic) Health Hazard | <u>No</u> | Reactive Hazard | <u>No</u> |
| Sudden Release of Pressure Hazard | <u>No</u> | | |

Section 302 - Extremely Hazardous Substances

This product is not known to contain any components in concentrations greater than one percent that are listed as Extremely Hazardous Substances in 40CFR Part 355 pursuant to the requirements of Section 302(a) of SARA.

Clean Water Act (CWA)

Under the CWA, discharge of crude oil and petroleum products to surface water without proper Federal and State permits must be reported immediately to the National Response Center at (800) 424-8802.

RCRA Classification – Unadulterated Product as a Waste

Prior to disposal, consult your Environmental contact to determine if TCLP (Toxicity Characteristic Leaching Procedure, EPA Test Method 1311) is required. Reference 40 CFR Part 261.

Toxic Substances Control Act (TSCA)

This product is in U.S. commerce, and listed in the TSCA Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.



**WARCO PREMIUM LUBRICANTS
MATERIAL SAFETY DATA SHEET
WARCO POWER STEERING FLUID**

6 of 6

Ecological Information

Ecotoxicity - No data available.

Environmental Fate – Ecological effects testing has not been conducted on this product. However, plants and animals may experience harmful or fatal effects when coated with petroleum-based products. Petroleum-based (mineral) lube oils will normally float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment.

Disclaimer of Liability

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