



*WARCO PREMIUM LUBRICANTS
MATERIAL SAFETY DATA SHEET
WARCO HEAVY DUTY AND PREMIUM OILS*

Any Questions Call: Warco Products, Inc. 12505 SW Herman Rd. Tualatin, OR 97062 USA (503) 783 0250 fax (503) 612 1700	Emergency Telephone: (24 HOURS) <p style="text-align: center;">CHEMTREC (800) 424 9300</p>	NFPA/HMIS Hazard Code <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">4=Extreme</td> <td style="width: 50%;">Health=0/0</td> </tr> <tr> <td>3=High</td> <td>Fire=1/1</td> </tr> <tr> <td>2=Moderate</td> <td>Reactivity=0/0</td> </tr> <tr> <td>1=Slight</td> <td>Personal</td> </tr> <tr> <td>0=Insignificant</td> <td>Protection Index: NA</td> </tr> </table>	4=Extreme	Health=0/0	3=High	Fire=1/1	2=Moderate	Reactivity=0/0	1=Slight	Personal	0=Insignificant	Protection Index: NA
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SECTION 1	MATERIAL IDENTIFICATION
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PRODUCT – WARCO HEAVY-DUTY SAE 20W-50 MOTOR OIL, HEAVY-DUTY AND HEAVY-DUTY PLUS 15W-40, WARCO PREMIUM 5W-30, 10-30, 10W-40 SL MOTOR OILS

CHEMICAL FAMILY	Petroleum Hydrocarbon; Blend Stock
CHEMICAL NAME	Mixture
PRODUCT CODE	00202050SJ
CHEMICAL FORMULA	Mixture
CAS NUMBER	Mixture (Refer to Section 2)
SYNONYMS	Motor Oil, Lubricating Oils

SECTION 2	HAZARDOUS COMPONENTS
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NFPA CODES Flammability 1 Reactivity 0 Health 0
 0 = Least 1 = Slight 2 = Moderate 3 = High 4 = Extreme

<u>Ingredients</u>	<u>CAS #</u>	<u>WT. %</u>
Refined Petroleum Oil(s)	Refer to Section 13	75 - 90
Proprietary Additives (Contains Zinc alkylidithiophosphate)	Mixture 68649-42-3	10 - 15
VI Improver	Mixture	0 - 10

SECTION 3	SHIPPING INFORMATION
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Shipping Name	Petroleum Lubricating Oil
Hazard Class	Non-hazardous liquid
UN Number	Not Applicable
Proper Shipping Name	Not Applicable
Hazard Label	Not Applicable
Reportable Quantity	Not Applicable



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SECTION 4 PHYSICAL DATA

Boiling Point	Not Determined
Vapor Pressure	Not Determined
Vapor Density	Not Determined
Solubility in water	Negligible
Appearance	Amber liquid
Odor	Mild petroleum odor
Specific Gravity	.880 - .890 @ 60°F Water = 1
Evaporation Rate	Not Determined
Freezing Point	Not Determined
Viscosity	19.5 cST @ 212°F (100°C)

SECTION 5 FIRE AND EXPLOSION HAZARD DATA

Flash Point	>428°F, 220°C (COC, ASTM D92)
Auto Ignition Temperature	Not Determined
Flammable Limits	LEL Not Established
(% by Volume in Air)	UEL Not Established
Extinguishing Media	CO2, dry chemical, foam, or water fog.

Water may be ineffective in fighting an oil fire unless used by experienced fire fighters.

Special Fire Fighting Procedures

Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described in Section 9 if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment.

For large storage fires involving this material and/or other lubricating products, do not enter any enclosed or confined space without full protective equipment including self-contained breathing apparatus.

Fire and Explosion Hazards

Carbon oxides and various hydrocarbons formed when burned. Water may cause frothing.

SECTION 6 REACTIVITY HAZARD DATA

Stability	Stable
Conditions to Avoid	Extreme Heat, flames or sparks
Incompatibility	Strong oxidizing agents
Polymerization	Hazardous polymerization is not expected to occur.
Hazardous Combustion / Decomposition Products	Carbon oxides and various hydrocarbons formed when burned - traces of sulfur, zinc and phosphorus oxides)



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SECTION 7	HEALTH HAZARD DATA
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OSHA PEL and ACGIH TVL - Oil Mist, Mineral

TWA 5mg/M³

STEL 10 mg/M³ - Ceiling

Exposure Limits None established

Effects of Exposure See Below

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**.

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.

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

Eye Contact Flush thoroughly with water. If irritation occurs, call a physician.

Injection Injection under the skin, in muscle or into the blood stream can cause irritation, inflammation, swelling or serious, permanent tissue damage. Seek medical attention immediately.

Chronic Effects Prolonged and/or frequent contact may cause drying, cracking (dermatitis) or folliculitis and may cause irritation.

SECTION 8	EMERGENCY and FIRST AID PROCEDURES
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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.



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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.**

SECTION 8 EMERGENCY and FIRST AID PROCEDURES (CONT.)

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.

SECTION 9 CONTROL and PROTECTIVE MEASURES

Storage and handling Store in an adequate ventilated area to control exposure. Special ventilation is necessary only if unusual operating conditions create mist concentrations in excess of the TLV.

Respiratory Protection 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 Protection Chemical face shield or protective goggles can reduce the possibility of accidental eye contact.

Skin Protection Impervious protection gloves can minimize skin exposures where prolonged or repeated exposures can occur.

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.

SECTION 10 SPILL and LEAK PROCEDURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean up.

Precautions if material is spilled or released

Wear protective equipment and/or garments described in Section 9 if exposure conditions warrant. Shut off source, if possible and contain spill. Clean up spills as soon as possible. Absorb large spills with commercially available absorbent materials with commercially available absorbent materials, such as absorbent clay or other dry inert materials. Keep out of water sources and sewers. Comply with all Federal, State, and Local regulations in reporting spill and cleanup. Provide adequate ventilation.

Waste Disposal Method

Place contaminated material in disposable containers. Material must be disposed of in accordance with Federal, State, and local regulations. Contact the RCRA Superfund Hotline directly @ (800) 424-9346, a regional US EPA office, or a permitted waste management facility to provide guidance concerning case specific disposal issues.



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SECTION 11 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.

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.



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SECTION 12 LABELING

NOTE

This product has been determined not to be a physical or a health hazard as defined by the OSHA Hazard Communication Standard.

Avoid prolonged skin contact with used motor oil. Prolonged contact with used motor oil has been shown to cause cancer in laboratory animals.

After draining oil, wash skin thoroughly with soap and water. Clean oil-soaked clothing before reuse.

SECTION 13 REFINED PETROLEUM OILS

The products listed on page one of this MSDS contain one or more of the following base oils.

<u>Chemical / Common Name</u>	<u>CAS No.</u>
Solvent Dewaxed, Heavy Paraffinic Distillate	64742-65-0
Solvent Dewaxed Residual Oil	64742-62-7
Solvent Refined Residuum	64742-01-4
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

This product is **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.
DO NOT TAKE INTERNALLY**

SECTION 14 NOTES

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