



Material Safety Data Sheet

Material Name: **WARCO CONVENTIONAL ENGINE OIL**

ID: 82545

***** Section 1 - Chemical Product and Company Identification *****

Product Name

WARCO CONVENTIONAL ENGINE OIL Includes Grades: 5W-20, 5W-30, 10W-30, 10W-40, 20W-50, 30W, 40W and 50W

Product Code: Prefix 21

Product Use: For lubricating passenger car motors. If these products are used in combination with other products, refer to the Material Safety Data Sheet for those products.

Synonyms: Petroleum oil, Lube oil, Petroleum hydrocarbon, Lubricant.

Warco Products, Inc.
12505 SW Herman Rd
Tualatin, OR 97062
USA

Phone: 1-503-783-0250

Emergency # CHEMTREC
1-800-424-9300
www.warcopro.com

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PREPARED BY: Product MSDS Coordinator

APPROVED BY: MSDS Task Force

***** Section 2 - Hazardous Identification *****

EMERGENCY OVERVIEW

Appearance

amber liquid, petroleum odor

Signal Word

CAUTION!

Health Hazards

May be harmful if swallowed. May irritate eyes and skin.

POTENTIAL HEALTH EFFECTS

Inhalation (Breathing)

These products are not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

Eyes

May cause irritation.

Skin

May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

Ingestion (Swallowing)

May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

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Chronic

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

Cancer Information

No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

Environmental Hazards

Not available. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
64741-88-4	Petroleum distillates, solvent-refined heavy paraffinic	0-100*
64742-01-4	Residual oils (petroleum), solvent refined	0-100*
64742-57-0	Residual oils (petroleum), hydrotreated	0-100*
64742-62-7	Residual oils (petroleum), solvent dewaxed	0-100*
72623-83-7	Lubricating oils (petroleum), C>25, hydrotreated bright stock	0-100*
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	3-100*
72623-87-1	Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	0-40
178603-64-0	Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index	0-45
178603-65-1	Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C20-40, branched and cyclic, high viscosity index	0-45
178603-66-2	Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C25-55, branched and cyclic, high viscosity index	0-45
Not Available	Mineral Oil	4-24
64742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	0-26
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0.25-1.5

* Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.

*** Section 4 - First Aid Measures ***

Inhalation (Breathing)

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

Eyes

If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

Skin

Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency.

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Ingestion (Swallowing)

Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Notes to Physicians

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire Fighting Measures ***

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, carbon monoxide, and oxides of sulfur, calcium and zinc and other unidentified organic compounds.

Conditions of Flammability

Sparks or flame. Product may burn, but does not ignite readily.

Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

Protective Equipment For Firefighting

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Equipment/Instructions

Keep storage containers cool with water spray.

NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Fire and Explosion Hazards

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Products are not sensitive to mechanical impact or static discharge.

*** Section 6 - Accidental Release Measures ***

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

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Shipping and Storing

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

Personal Protective Equipment: Respiratory

No respirator is required under normal conditions of use. Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult with a health and safety professional for specific respirators appropriate for your use.

Personal Protective Equipment: Eyes/Face

Where eye contact is likely, wear safety glasses; contact lens use is not recommended.

Personal Protective Equipment: Skin

Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber or equivalent gloves is not recommended.

When products are heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Personal Protective Equipment: Personal Hygiene

Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with these products.

Other Personal Protective Equipment

Where spills and splashes are likely, facilities storing or using these products should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

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*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor :	Liquid, amber, petroleum odor.	pH:	Not applicable
Boiling Point:	475°F (246°C) (minimum)	Melting Point:	Not available [pour point 0°F (-18°C) (maximum)].
Solubility (H2O):	Insoluble	Specific Gravity:	0.88 (water = 1) (approximately)
Density:	7.3 LB/US gal (880 g/l) (approximately)	Octanol/H2O Coeff.:	Not available
Evaporation Rate:	Not available	Molecular Weight:	Not applicable
Odor Threshold:	Not available	Auto Ignition:	Not available
LFL:	Not available	Flash Point:	383°F (195°C) (minimum) Cleveland Open Cup
UFL:	Not available	Viscosity:	
Vapor Pressure:	less than 0.1 mmHg at 68°F (20°C)	Vapor Density:	Not available

*** Section 10 - Chemical Stability & Reactivity Information ***

Stability

Stable under normal temperatures and pressures.

Incompatibility

Avoid oxidizing agents, acids and reactive halogens.

Reactivity

Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

Hazardous Decomposition Products

None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

Conditions To Avoid

Avoid sparks or flame when not in use.

*** Section 11 - Toxicological Information ***

Toxicity Data

Component Analysis - LD50/LC50

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Residual oils (petroleum), solvent refined (64742-01-4)

Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Residual oils (petroleum), solvent dewaxed (64742-62-7)

Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)

Oral LD50 Rat >5000 mg/kg

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit >4480 mg/kg

Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (72623-87-1)

Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)

Inhalation LC50 Rat >5 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >5000 mg/kg

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Acute Effects

May be harmful if swallowed. May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin. May cause nausea, vomiting, and diarrhea. May be harmful if swallowed and enters airways: Ingestion may cause lung damage and possible death.

Repeated Dose Effects

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Target Organ Effects

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation., Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis).

Sensitization

Based on best current information, there is no known human sensitization associated with this product.

Mutagenicity

Based on best current information, there are no mutagenic effects associated with this product.

Reproductive Toxicity

Based on best current information, there is no known reproductive toxicity associated with these products. Also see **SECTION 15: CALIFORNIA**.

Teratogenicity

Based on best current information, there is no known teratogenicity associated with this product.

Toxicologically Synergistic Products

Based on best current information, there are no known toxicologically synergistic products associated with this product.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

Not available.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	

Residual oils (petroleum), solvent refined (64742-01-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	

Residual oils (petroleum), solvent dewaxed (64742-62-7)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	

Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	>10000 mg/L	

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Brachydanio rerio	79.6 mg/L [semi-static]	
96 Hr LC50 Pimephales promelas	3.2 mg/L [semi-static]	

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Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (72623-87-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	

Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	1.0-5.0 mg/L [static]	
96 Hr LC50 Pimephales promelas	10.0-35.0 mg/L [semi-static]	

Persistence/Degradability

No information available for the product.

Bioaccumulation/Accumulation

No data available for this product.

Mobility in Environmental Media

No information available for the product.

Other Adverse Effects

No additional information available.

*** Section 13 - Disposal Considerations ***

Disposal Instructions

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

US EPA Waste Number & Descriptions

These products, if discarded, are not expected to be a characteristic or listed hazardous waste. If recycled as used oil in the USA, they can be managed in accordance with the used oil exemption under 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.

*** Section 14 - Transportation Information ***

Emergency Response Guide Number

Not applicable. Reference *North American Emergency Response Guidebook*

DOT Shipping Name: Not regulated as a hazardous material.

TDG Shipping Name: Not regulated as a dangerous good.

IATA Information

No Classification Assigned.

IMDG Information

No Classification Assigned.

*** Section 15 - Regulatory Information ***

VOC (As Regulated)

Negligible as per U.S EPA 40 CFR 51.100(s)

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SARA Sections 311/312

These products pose the following health hazard(s) as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313

These products contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Component Analysis

This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA

All the components of these products are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	Yes
Residual oils (petroleum), solvent refined	64742-01-4	Yes
Residual oils (petroleum), hydrotreated	64742-57-0	Yes
Residual oils (petroleum), solvent dewaxed	64742-62-7	Yes
Lubricating oils (petroleum), C>25, hydrotreated bright stock	72623-83-7	Yes
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	Yes
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	72623-87-1	Yes
Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C20-40, branched and cyclic, high viscosity index	178603-65-1	Yes
Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C25-55, branched and cyclic, high viscosity index	178603-66-2	Yes
Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index	178603-64-0	Yes
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	Yes
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	Yes

State Regulations

This product does not contain detectable amounts of any chemical known to the State of California to cause cancer.

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U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

No component(s) are listed under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

Canadian Regulations

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	DSL
Residual oils (petroleum), solvent refined	64742-01-4	DSL
Residual oils (petroleum), hydrotreated	64742-57-0	DSL
Residual oils (petroleum), solvent dewaxed	64742-62-7	DSL
Lubricating oils (petroleum), C>25, hydrotreated bright stock	72623-83-7	DSL
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	DSL
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	72623-87-1	DSL
Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C20-40, branched and cyclic, high viscosity index	178603-65-1	DSL
Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C25-55, branched and cyclic, high viscosity index	178603-66-2	DSL
Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index	178603-64-0	DSL
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	DSL
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	DSL

Canadian WHMIS Information

Not regulated

Canadian Environmental Protection Act (CEPA)

All the components of these products are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

* * * Section 16 - Other Information * * *

Label/Other Information

Not available

Revision Information

This MSDS has been revised in the following sections: Section 1 (Dates/Address), Section 3 (Composition), Section 11 (Toxicology fields updated), Section 12 (Ecotoxicity , fields updated), Section 16 (Revision Information).

Disclaimer

User assumes all risks incident to the use of this (these) product(s). To the best of our knowledge, the information contained herein is accurate. However, Warco Products Inc. assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.

End of Sheet 82545