



MATERIAL SAFETY DATA SHEET

SEMI-SYNTHETIC MOTOR OIL

PRODUCT & COMPANY INFORMATION

Product Name: SEMI-SYNTHETIC MOTOR OIL

Manufacturer Information

Company Name: Warco Products, Inc.
Address: 12505 Herman Rd. Tualatin, OR 97062 USA
Phone: 503.783.0250
Fax: 503.612.1700
Email: info@warcopro.com

24 Hour Emergency Contact: Chemtrec 800-424-9300

SECTION I: IDENTITY

Product/Material Name: Super S Synthetic Blend SAE 10W-40 Partial Synthetic Motor Oil
Chemical Name: Mixture
Chemical Family/Classification: Petroleum/Synthetic hydrocarbon
Molecular Weight: NA
Chemical Formula: NA
Material Use: Motor Oil
HMIS HAZARD RATING:
 [0-Minimal; 1-Slight; 2-Moderate; 3-Serious; 4-Severe]
Health: 1
Flammability: 1
Reactivity: 0
WARNING STATEMENTS (If Applicable):
 WARNING! AVOID SKIN CONTACT WITH USED MOTOR OILS.

SECTION II: PRODUCT/HAZARDOUS INGREDIENT INFORMATION

<u>INGREDIENTS-CHEMICAL</u>	<u>EXPOSURE LIMITS-TLV</u>	<u>LD50</u>	<u>LC50</u>	<u>%</u>
Severely refined petroleum basestocks and/or Synthetic hydrocarbons. May contain one or more of the following CASRN, 64741-88-4; 64742-54-7; 64742-65-0; 72623-84-8; 72623-87-1; 72623-86-0; 72623-83-7; 72623-85-9; 151006-60-9; 151006-63-2	PEL/TWA: 5mg/m3, mist (OSHA, ACGIH) STEL: 10 mg/m3, mist (ACGIH)	Oral, rat:>5 g/kg.	Inhalation, 4 hr., rat: >5000 mg/m3	60-100
Multi-functional additive mixture composed of organo-metallic compounds, typically containing zinc dialkyl dithiophosphate, carboxylic esters, polyolefins and polyolefin amide alkeneamines. [CASRN NA, Mixture] ND ND ND 5-10	ND	ND	ND	5-10
Ethylene-popylene-diene polymer and functionalized polymer blend [CASRN NA, mixture]	ND	ND	ND	1-5

NOTE: Product contains no materials currently classified as carcinogenic per the Annual Report of the National Toxicology Program [NTP], OSHA Hazard Communication Standard or the International Agency for Research on Cancer [IARC, Groups 1, 2A or 2B].



MATERIAL SAFETY DATA SHEET

SEMI-SYNTHETIC MOTOR OIL

SECTION III: FIRST AID MEASURES

Signs/Symptoms: Transient eye irritation, redness, tearing.

Eye contact: Flush with clear water for at least 15 minutes or until any irritation subsides. If irritation persists, seek medical attention.

Skin Contact: Remove contaminated clothing and wash before reuse. Wipe excess material from skin. Wash exposed area with soap and water.

Inhalation: If irritation or drowsiness occur, move the person to fresh air. Administer respiratory assistance if breathing is difficult or stops; Consult a physician.

Ingestion: Give plenty of water or other mild drinkable fluids and call a physician immediately. Do not induce vomiting without express consent of medical personnel.

SECTION IV: HEALTH HAZARD DATA

Exposure Limits:

See Section II, Product/Ingredient Information.

PRIMARY ROUTES OF ENTRY

Eye Contact

Skin Contact

Skin Absorption

Inhalation (Acute)

Inhalation (Chronic)

Ingestion

Effects of Exposure:

Acute – (Evaluation based on components and/or similar products)

Eyes: Not expected to cause prolonged or significant eye irritation.

Skin: Not expected to cause prolonged or significant skin irritation.

Respiratory system: Harmful concentrations of mists/vapors are unlikely through customary handling or use of this product.

Ingestion: Low order of toxicity, but may cause gastrointestinal disturbances, diarrhea. Ingestion of large amounts may cause headache, drowsiness, nausea, vomiting or diarrhea.

Chronic - Prolonged or repeated skin contact may cause skin drying, cracking, irritation, defatting and dermatitis.

WARNING! AVOID SKIN CONTACT WITH USED MOTOR OILS. Used motor oils have caused skin cancer in laboratory animals when repeatedly applied and left in place between applications.

The product contains petroleum baseoils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard [29 CFR 1910.1200]. These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). Medical Conditions Generally Aggravated by Exposure: Pre-existing skin disorders.

TOXICOLOGY DATA (Product)

Acute Data (Median Lethal Dose - species)

Oral LD50 - rat: ND

Dermal LD50 – rabbit: ND

Inhalation LC50 – rat: ND

Irritancy Data

Eye irritation – rabbit: ND

Skin irritation – rabbit: ND

Sensitization – guinea pig: ND



MATERIAL SAFETY DATA SHEET

SEMI-SYNTHETIC MOTOR OIL

Other: No data regarding presence of tetragenicity, mutagenicity, respiratory toxicity, sensitizing ability or synergistic substances.

SECTION V: EMPLOYEE PROTECTION

Ventilation:

No special ventilation is usually necessary. However, if operating conditions may create high airborne concentrations of this material, special or local ventilation may be needed.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: None required under normal use. If exposure is expected to exceed occupational exposure limits, use a NIOSH-approved respirator to prevent overexposure. In accordance with 29 CFR 1910.134, use either an atmosphere supplying respirator or an air-purifying respirator for organic vapors and particulates.

Eye: Safety goggles or glasses.

Gloves (specify): Wear oil impervious type, such as neoprene, nitrile, polyvinylchloride, to minimize skin contact.

Clothing: No special requirement; Normal work clothing. A coverall or apron may be used to minimize skin contact

Footwear: No special requirement.

Other: N/A

Work/Hygienic Practices: Avoid prolonged and repeated skin contact. Do not wear contaminated clothing; Launder before reuse or discard. Wash thoroughly with soap and water after handling.

Storage/Handling: Keep containers closed when not in use. Do not store near heat, sparks, flame or strong oxidants.

Avoid breathing mist. Maintain adequate ventilation. Avoid prolonged or repeated contact with skin.

SECTION VI: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: ND

Vapor Pressure (mm.Hg. @25 Deg C): ND

Percent Volatiles: Negligible

Solubility in Water: Negligible

pH-Value: NA

Viscosity@100 Deg C, cSt.: 15.2 typ.

Appearance, Odor & Physical State: Clear, amber liquid; mild odor

Specific Gravity (Water=1): 0.88

Vapor Density (Air=1): ND

Evaporation Rate (BuAc=1): <0.1

Freezing Point: -33 Deg C

Viscosity @ 40 Deg C, cSt.:80.53 typ.

Odor Threshold: NA Coefficient of Water/Oil Dist.: ND

SECTION VII: FIRE & EXPLOSION DATA

FLAMMABILITY Yes [x] No [] NFPA Class IIIB material – Combustible liquid

Flash Point (COC): 415 Deg F (213 Deg C) min.

Flash Point (COC): > 415 Deg F (213 Deg C) min

Autoignition Temperature: ND

Flammability limits in Air, % Vol.: Upper – ND Lower – ND

Extinguishing Media:

CO₂, dry chemical, foam and water fog. Do not use water jets.

Special Firefighting Procedures/Unusual and Explosion Hazards:

Material must be preheated to burn. Do not enter confined areas without full protective equipment, including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

EXPLOSION DATA

Sensitivity to Mechanical Impact: NA

Sensitivity to Static Discharge: NA



MATERIAL SAFETY DATA SHEET

SEMI-SYNTHETIC MOTOR OIL

SECTION VIII: REACTIVITY

Stability: Stable at ambient temperatures
Hazardous Polymerization: Will not occur.
Conditions and Materials to Avoid (Incompatibilities):
Heat, open flame and oxidizing materials.
Hazardous Combustion or Decomposition Products:
Smoke, fumes, oxides of carbon

SECTION IX: ENVIRONMENTAL PROTECTION

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300, 24 hrs. for U.S. transportation related spills, leaks, fire, exposure or accident.

CANUTEC EMERGENCY PHONE NUMBER: (613) 996-6666, 24 hrs. for Canadian transportation related spills, leaks, fire, exposure or accident.

Spill or Leak Procedures:

Product may burn but is not readily ignitable. Use best engineering practices when attempting cleanup of a large spill.

Large spills - Wear respirator and protective clothing as appropriate. Stop source of leak if possible.

Prevent entry into water sources. Dike and contain spill. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an inert absorbent such as clay, sand or other suitable materials; Store and dispose of properly. Where feasible and appropriate, remove contaminated soil.

Small spills - Soak up spill with an inert absorbent such as clay, sand or other suitable materials; Store in a closed container and dispose of properly.

Regulatory spill reporting requirements may apply; Contact governmental agency or legal counsel for advice.

Waste Disposal Method:

If discarded as supplied, material does not meet RCRA characteristic definition of ignitability, corrosivity or reactivity and is not listed in 40 CF 261.33. The toxicity characteristic has not been evaluated. Under RCRA, the applicable hazardous waste classification must be evaluated prior to disposal of the material. Use of the product, processing or contamination may render the resulting material hazardous. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in accordance with governmental regulations regarding air pollution, water pollution or health.

Don't pollute - Conserve Resources. Dispose of used oil properly.

CAUTION: Improper disposal or reuse of the empty container may be hazardous and illegal. Cutting or welding of empty containers may cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place. Refer to applicable governmental regulations.

SECTION X: REGULATORY INFORMATION

TRANSPORTATION

Special Shipping Information/DOT Proper Shipping Name: Not regulated.

CHEMICAL CONTROL REGULATIONS:

TSCA Status: All components of this material appear on the Toxic Substance Control Act Chemical Substances Inventory.

CEPA Status: All components of this material appear on the Canadian Domestic Substances List.

Canadian Workplace Hazardous Material Identification System (WHMIS) Classification: Material is not a "controlled product".

EPCRA - Emergency Planning and Community Right to Know Act (SARA Title III):

Section 302/304 Extremely Hazardous Substance: NA

CERCLA Section 102(a) Hazardous Substance: NA



MATERIAL SAFETY DATA SHEET

SEMI-SYNTHETIC MOTOR OIL

Section 311 Hazard Category

Acute (immediate)

Chronic (delayed)

Fire

Sudden Release of Pressure

Reactive

Not applicable

Section 313 Toxic Release Inventory Chemical/Category:

Zinc compounds, 1.5% (wt.) max.

U.S. STATE RIGHT TO KNOW LAWS

New Jersey Worker and Community Right to Know Act, N.J.A.C. 8:59-5 Labelling Information: Motor Oil

NOTICE:

THE INFORMATION PRESENTED HEREIN IS COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE, BELIEVED TO BE ACCURATE TO THE BEST OF CASTROL'S KNOWLEDGE, AND OFFERED IN GOOD FAITH FOR THE PURPOSE OF HAZARD COMMUNICATION.

BECAUSE PRODUCT USE IS BEYOND OUR CONTROL, NO WARRANTY IS GIVEN, EXPRESSED OR IMPLIED. CASTROL INC. CANNOT ASSUME ANY LIABILITY FOR THE USE OF INFORMATION CONTAINED HEREIN. TO DETERMINE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USERS SHOULD CONSULT A LEGAL ADVISOR OR APPROPRIATE GOVERNMENTAL AGENCY.