MATERIAL SAFETY DATA SHEET MSDS Number: 400508ET - 0 24 Hour Emergency Assistance: CHEMTEL (877) 276-7283 General Assistance Number: (877) 276-7285 \_\_\_\_\_ SECTION 1 PRODUCT IDENTIFICATION \_\_\_\_\_ MATERIAL IDENTITY: HAVOLINE® Motor Oil SAE 5W-20 02197 PRODUCT CODES: COMPANY ADDRESS: Equilon Enterprises LLC, P. O. Box 4453, Houston, TX. 77210-4453 \_\_\_\_\_ PRODUCT/INGREDIENTS SECTION 2 \_\_\_\_\_ CAS#CONCENTRATIONINGREDIENTSMixture100 %weightSAE 5W-20 Motor Oil64742-54-780 - 89.99 %weightSolvent-refined, Hydrotreated heavy paraffinic distillate 64742-52-5 5 - 14.99 %weight Hydrotreated heavy naphthenic distillate Proprietary 1 - 4.99 %weight Proprietary additives \_\_\_\_\_ SECTION 3 HAZARDS IDENTIFICATION \_\_\_\_\_ EMERGENCY OVERVIEW Appearance & Odor: Bright and clear liquid. Petroleum oil odor Health Hazards: No known immediate health hazards. Physical Hazards: No known physical hazards. NFPA Rating (Health, Fire, Reactivity): 0, 1, 0 Hazard Rating: Least - 0 Slight - 1 Moderate - 2 High - 3 Extreme - 4 Inhalation: Inhalation of vapors (generated at high temperatures only) or oil mist may cause mild irritation of the nose, throat, and respiratory tract. Eye Irritation: Lubricating oils are generally considered no more than minimally irritating to the eyes. Skin Contact: Lubricating oils are generally considered no more than minimally irritating to the skin. Prolonged and repeated contact may result in defatting and drying of the skin that may cause various skin disorders such as dermatitis, folliculitis or oil acne. Ingestion: Lubricating oils are generally no more than slightly toxic if swallowed.

Other Health Effects: The International Agency for Research on Cancer (IARC) has determined there is sufficient evidence for the carcinogenicity in experimental animals of used gasoline motor oils. Handling procedures and safety precautions in the MSDS should be followed to minimize exposure to the used product. Material may release hydrogen sulfide (H2S), a highly toxic and extremely flammable gas, when heated to 120 Degrees F or higher. H2S can cause irritation of the eyes and respiratory tract, headache, dizziness, nausea, vomitting, diarrhea, and pulmonary edema. At concentrations above 300 ppm, respiratory paralysis, causing unconsciousness and death, can occur. The odor ("rotten egg") threshold is 0.02 ppm. Do not depend on sense of smell for warning; H2S rapidly deadens the sense of smell. Signs and Symptoms: Irritation as noted above. Aggravated Medical Conditions: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product. For additional health information, refer to section 11. \_\_\_\_\_ FIRST AID MEASURES SECTION 4 \_\_\_\_\_ Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention. Skin: Remove contaminated clothing and shoes and wipe excess from skin. Flush skin with water, then wash with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Eye: Flush with water. If irritation occurs, get medical attention. Ingestion: Do not induce vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical attention. Note to Physician: In general, emesis induction is unnecessary in high viscosity, low volatility products such as oils and greases. \_\_\_\_\_ SECTION 5 FIRE FIGHTING MEASURES \_\_\_\_\_ Flash Point [Method]: >359 °F/>181.67 °C [ Cleveland Open Cup] Extinguishing Media: Material will float and can be re-ignited on surface of water. Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water. Fire Fighting Instructions: Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and

rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

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Protective Measures: May burn although not readily ignitable.

Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8.

Spill Management: FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Place in container for proper disposal.

Reporting: CERCLA: Product is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) petroleum exclusion. Releases to air, land, or water are not reportable under CERCLA (Superfund).

CWA: This product is an oil as defined under Section 311 of EPA's Clean Water Act (CWA). Spills into or leading to surface waters that cause a sheen must be reported to the National Response Center, 1-800-424-8802.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures:

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet. Launder contaminated clothing before reuse. Properly dispose of contaminated leather articles such as shoes or belts that cannot be decontaminated. Avoid heat, open flames, including pilot lights, and strong oxidizing agents. Use explosion-proof ventilation to prevent vapor accumulation. Ground all handling equipment to prevent sparking.

Material may release hydrogen sulfide (H2S), a highly toxic and extremely flammable gas, when heated to 120 Degrees F or higher. H2S may collect in the headspace of the container.

Storage: Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.

Container Warnings: Keep containers closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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Oil mist, mineral ACGIH TLV TWA: 5 mg/m3 STEL: 10 mg/m3 Oil mist, mineral OSHA PEL TWA: 5 mg/m3 Hydrogen sulfide ACGIH - TLV TWA: 10 ppmm STEL: 15 ppmm Hydrogen sulfide OSHA - PEL\_IS TWA: 10 ppmm STEL: 15 ppmm Hydrogen sulfide Thermal > 120 degrees F. EXPOSURE CONTROLS Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. PERSONAL PROTECTION Personal protective equipment (PPE) selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below. Eye Protection: Chemical Goggles, or Safety glasses with side shields Skin Protection: Use protective clothing which is chemically resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements. Published literature, test data and/or glove and clothing manufacturers indicate the best protection is provided by: Neoprene, or Nitrile Rubber **Respiratory Protection:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134. Types of respirator(s) to be considered in the selection process include: For Mist: Air Purifying, R or P style NIOSH approved respirator. For Vapors: Air Purifying, R or P style prefilter & organic cartridge, NIOSH approved respirator. Self-contained breathing apparatus. \_\_\_\_\_ SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES \_\_\_\_\_ Appearance & Odor: Bright and clear liquid. Petroleum oil odor Substance Chemical Family: Lubricants API Gravity: 34.5 Appearance: Bright and clear liquid. Flash Point: > 359 °F [Cleveland Open Cup] Odor: Petroleum oil odor Pour Point: -45 °F - - -15 °F Specific Gravity: 0.856 - - 0.913 Viscosity: 48.5 cSt @ 40 °C

\_\_\_\_\_ SECTION 10 REACTIVITY AND STABILITY \_\_\_\_\_ Stability: Material is stable under normal conditions. Conditions to Avoid: Avoid heat and open flames. Materials to Avoid: Avoid contact with strong oxidizing agents. Hazardous Decomposition Products: Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes pyrolysis or combustion. Aldehydes, Calcium Oxide, Carbon Monoxide, Carbon Dioxide, Hydrogen Sulfide, Ketones and other unidentified organic compounds may be formed upon combustion. \_\_\_\_\_ SECTION 11 TOXICOLOGICAL INFORMATION \_\_\_\_\_ Acute Toxicity Dermal LD50 >5.0 g/kg(Rabbit) OSHA: Non-Toxic Based on components(s) Eye Irritation Draize 0.67 / 110 [Rabbit, 24 HOUR(S)] OSHA: Non-Irritating Based on components(s) Oral LD50 >5.0 g/kg(Rat) OSHA: Non-Toxic Based on components(s) Skin Irritation Draize 0.27 / 8.0 [Rabbit, 24 HOUR(S)] OSHA: Non-Irritating Based on components(s) Carcinogenicity Classification SAE 5W-20 Motor Oil NTP: No IARC: Not Reviewed ACGIH: No OSHA: No \_\_\_\_\_ SECTION 12 ECOLOGICAL INFORMATION \_\_\_\_\_ Environmental Impact Summary: There is no ecological data available for this product. However, this product is an oil. It is persistent and does not readily biodegrade. However, it does not bioaccumulate. \_\_\_\_\_ SECTION 13 DISPOSAL CONSIDERATIONS \_\_\_\_\_ RCRA Information: Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. may affect the classification. Refer to the latest EPA, state and local regulations regarding proper disposal.

\_\_\_\_\_ SECTION 14 TRANSPORT INFORMATION \_\_\_\_\_ US Department of Transportation Classification This material is not subject to DOT regulations under 49 CFR Parts 171-180. This product is an oil under 49CFR (DOT) Part 130. If shipped by rail 0i1:or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule. International Air Transport Association Not regulated under IATA rules. International Maritime Organization Classification Not regulated under International Maritime Organization rules. \_\_\_\_\_ SECTION 15 REGULATORY INFORMATION \_\_\_\_\_ FEDERAL REGULATORY STATUS OSHA Classification: Product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 19.10.1200, because it carries the occupational exposure limit for mineral oil mist. Ozone Depleting Substances (40 CFR 82 Clean Air Act): This material does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances. Superfund Amendment & Reauthorization Act (SARA) Title III: There are no components in this product on the SARA 302 list. SARA Hazard Categories (311/312): Immediate Health:NO Delayed Health:NO Fire:NO Pressure:NO Reactivity:NO SARA Toxic Release Inventory (TRI) (313): There are no components in this product on the SARA 313 list. Toxic Substances Control Act (TSCA) Status: All component(s) of this material is(are) listed on the EPA/TSCA Inventory of Chemical Substances. Other Chemical Inventories: Component(s) of this material is (are) listed on the Canadian DSL State Regulation This material is not regulated by California Prop 65, New Jersey Right-to-Know Chemical List or Pennsylvania Right-To-Know Chemical List. However for details on your regulation requirements you should contact the appropriate agency in your state. SECTION 16 OTHER INFORMATION

\_\_\_\_\_ HMIS Rating (Health, Fire, Reactivity): 0, 1, 0 Revision#: 0 Revision Date: 11/09/2000 Revisions since last change (discussion): This Material Safety Data Sheet has changed because Equiva Services LLC. has implemented new software to generate the sheet. There will be slight differences in the hazard and precautionary language as we incorporate the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998). There are no significant changes to the health, safety or precautionary messages. We encourage you to take the opportunity to reread the sheet and review the information contained. \_\_\_\_\_ SECTION 17 LABEL INFORMATION \_\_\_\_\_ READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FOR USE IN THE WORKPLACE. THIS LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUMER PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS. PRODUCT CODES: 02197 HAVOLINE® Motor Oil SAE 5W-20 ATTENTION! PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE OIL ACNE OR DERMATITIS. USED GASOLINE ENGINE OIL HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS. Precautionary Measures: Avoid prolonged or repeated contact with eyes, skin and clothing. Wash thoroughly after handling. FIRST AID Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention. Skin Contact: Remove contaminated clothing and shoes and wipe excess from skin. Flush skin with water, then wash with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Eye Contact: Flush with water. If irritation occurs, get medical attention. Ingestion: Do not induce vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical attention. FIRE In case of fire, Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water. Material will float and can be re-ignited on surface of water.

SPILL OR LEAK

Dike and contain spill. FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or

other suitable material. Place in non-leaking container and seal tightly for proper disposal.

CONTAINS: Solvent-refined, Hydrotreated heavy paraffinic distillate, 64742-54-7; Hydrotreated heavy naphthenic distillate, 64742-52-5; Proprietary additives, Proprietary

NFPA Rating (Health, Fire, Reactivity): 0, 1, 0 HMIS Rating (Health, Fire, Reactivity): 0, 1, 0

TRANSPORTATION

US Department of Transportation Classification This material is not subject to DOT regulations under 49 CFR Parts 171-180.

Oil: This product is an oil under 49CFR (DOT) Part 130. If shipped by rail or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule.

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flames or heat. Keep container closed and drum bungs in place.

Name and Address Equilon Enterprises LLC P. O. Box 4453 Houston, TX 77210-4453

TRANSPORTATION EMERGENCY CHEMTEL (877) 276-7283

HEALTH EMERGENCY CHEMTEL (877) 276-7283

ADMINISTRATIVE INFORMATION COMPANY ADDRESS: Equilon Enterprises LLC, P. O. Box 4453, Houston, TX. 77210-4453 Company Product Stewardship & Regulatory Compliance Contact: Ken Darmer Phone Number: (281) 874-7982 MSDS FAX-BACK Phone Number: (877) 276-7285

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