Material Safety Data Sheet

SECTION 1 IDENTIFICATION

Product Name: S&S® Heavy Duty Petroleum Motor Oil  
SAE 20w50  

Manufacturer:  
Intercontinental Lubricants Corp./Spectro Oils of America  
993 Federal Road  
Brookfield, CT 06804  
(203) 775-1291  
Fax: (203) 775-8720

MSDS Date of Preparation: 11/27/12

SECTION 2 PRODUCT COMPONENTS

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>CAS#</th>
<th>WT.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Oils</td>
<td>Proprietary</td>
<td>75-95</td>
</tr>
<tr>
<td>Zinc Dialkyl dithiophosphate</td>
<td>Proprietary</td>
<td>1-5</td>
</tr>
<tr>
<td>Proprietary Additives</td>
<td>Proprietary</td>
<td>10-20</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product is an amber to brown colored liquid with a mild petroleum odor. Slight fire hazard (Flash Point 485-520°F). May cause mild eye and skin irritation. Accidental ingestion may cause gastrointestinal effects with nausea and diarrhea. Aspiration into the lungs during ingestion or vomiting may cause lung damage. Prolonged or repeated skin contact with used motor oil may cause skin cancer.

HEALTH HAZARDS:
INHALATION: Excessive inhalation of vapors or mists may cause upper respiratory tract irritation and central nervous system effects including headache, dizziness and nausea. Breathing high concentrations of oil mists may cause lipid pneumonia.

SKIN CONTACT: Prolonged or repeated contact may cause mild irritation or dryness.

INGESTION: Swallowing large amounts may cause gastrointestinal effects including nausea and diarrhea. Aspiration into the lungs during ingestion or vomiting may cause lipid pneumonia.

CHRONIC EFFECTS OF OVEREXPOSURE: Repeated skin contact may cause dermatitis. Used motor oils have been found to cause skin cancer in skin painting studies with laboratory animals.

CARCINOGENICITY: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with chronic skin diseases may be at increased risk from exposure to this material.

SECTION 4 EMERGENCY and FIRST AID PROCEDURES

EYE CONTACT: Immediately flush eye with water. Get medical attention if irritation persists.

SKIN CONTACT: Wash thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation develops.
**INHALATION:** Remove victim to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

**INGESTION:** Do not induce vomiting. Never give anything by mouth to an unconsciousness person. Get immediate medical attention by calling a Poison Control Center or hospital emergency department.

### SECTION 5 FIRE and EXPLOSION HAZARD DATA

**FLASH POINT:**
- S.A.E.50: 510°F/265°C
- S.A.E.60: 515°F/268°C
- Grade 70: 520°F/272°C
- 20w50: 485°F/251°C

**METHOD:** COC

**FLAMMABLE LIMITS:** (vol % in air) Not established

**AUTOIGNITION TEMPERATURE:** Not established

**EXTINGUISHING MEDIA:** Water spray or fog, foam, carbon dioxide, dry chemical.

**SPECIAL FIREFIGHTING PROCEDURES:** Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Cool exposed intact containers with water spray or stream.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** At elevated temperatures containers may rupture. Use of large amounts of water may cause product to float and spread fire.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Wear appropriate protective equipment. Dike spill and collect into closable containers for disposal with an inert absorbent. Prevent entry in storm sewers and waterways. Report spill as required by local and federal regulations.

Avoid eye and prolonged/repeated skin contact. Avoid breathing vapors and mists. Wash thoroughly after handling. Remove oil-soaked clothing and launder before re-use. Discard oil soaked shoes and other items than cannot be laundered.

Protect containers from physical damage. Store in a cool area away from oxidizers.

Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all MSDS precautions in handling empty containers.

### SECTION 7 HANDLING and STORAGE

Avoid eye and prolonged/repeated skin contact. Avoid breathing vapors and mists. Wash thoroughly after handling. Remove oil-soaked clothing and launder before re-use. Discard oil soaked shoes and other items than cannot be laundered.

**RESPIRATORY PROTECTION:** None needed under normal use conditions with adequate ventilation. If the TLV is exceeded use a NIOSH approved respirator with organic vapor cartridges and a particulate pre-filter (R or P series). For higher concentrations (greater than 10 times the TLV) a NIOSH approved supplied air respirator (with escape bottle if required) or self-contained breathing apparatus may be required. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

**VENTILATION:** Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. If the recommended exposure limit is exceeded increased mechanical ventilation such as local exhaust may be required.
GLOVES: Rubber, neoprene or other impervious gloves are recommended where prolonged or repeated skin contact is likely.

EYE PROTECTION: Safety glasses or goggles recommended.

OTHER PROTECTIVE EQUIPMENT: Impervious apron, boots and other clothing are recommended if needed to avoid prolonged/repeated skin contact. Suitable washing facilities should be available.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point (@ 760 mmHg)</td>
<td>&gt;660°F</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1)</td>
<td>0.89</td>
</tr>
<tr>
<td>Vapour Pressure (@ 20 °C mm Hg)</td>
<td>0.01</td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>&gt;12</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Nil</td>
</tr>
<tr>
<td>Coefficient of Water/Oil</td>
<td>Not available</td>
</tr>
</tbody>
</table>

HALF LIFE: Nil

APPEARANCE AND ODOR: Light amber to brown liquid, mild petroleum odor.

SECTION 10 STABILITY and REACTIVITY

STABILITY: This material is stable.

CONDITIONS TO AVOID: Avoid excessive heat.

INCOMPATIBILITY: Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield carbon monoxide, carbon dioxide, sulfur oxides and hydrocarbon fragments.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY VALUES:

Product: Oral rat LD50 > 5 g/kg
Skin rabbit LD50 >2 g/kg

None of the components is listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA.

None of the components have been found to be mutagenic.

None of the components are known to cause sensitization in animals or humans.

None of the components are known to cause adverse reproductive effects or teratogenic effects in animals or humans.

SECTION 12: ECOLOGICAL INFORMATION

There is no ecotoxicity data available for this product at this time.

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL METHOD: Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT SHIPPING DESCRIPTION: Not Regulated
DOT HAZARD CLASSIFICATION: None
DOT LABELS REQUIRED (49CFR172.101): None
UN NUMBER: None

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD CLASSIFICATION: Not Hazardous

EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.

EPA SARA 311 HAZARD CLASSIFICATION: Not Hazardous.

EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:

- Zinc Compounds 1-5%

WHMIS CLASSIFICATION: Not a controlled product.

This product has been classified in accordance with the hazard criteria in the CPR and the MSDS contains all the information required by the CPR.

TOXIC SUBSTANCES CONTROL ACT: All of the components of this product are listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65: This product contains the following chemicals known to the State of California to cause cancer: Lead 13.25 ppm, cadmium 13.25 ppm.

This product contains the following chemicals known to the State of California to cause reproductive harm: Cadmium 13.25 ppm (male, developmental), lead 13.25 ppm (developmental, male and female).

Australia: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

Canada: All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

European Union: All of the ingredients are listed on the European Inventory of New and Existing Chemical Substances (EINECS) inventory.

Japan ENCS: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (METI) List.

Korea: All of the components of this product are listed on the Korean Existing Chemicals List.

Philippines: All of the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances List.

SECTION 16: OTHER INFORMATION

NFPA Rating: Health: 0 Fire: 1 Reactivity: 0