Product name: 5606 Aviation Hydraulic Oil

SECTION 1: Identification

Product identifier: 5606 Aviation Hydraulic Oil.
Synonyms: None available.
Product Code Number: 5606 Aviation Hydraulic Oil.
SDS number: CGF004
Recommended use: Hydraulic Lubricant.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
Company Name: SPX Hydraulic Technologies.
Company Address: 5885 11th Street
Rockford, IL 61109
Company Telephone: Office hours (Mon – Fri)
8.00am – 5:00pm (CST)
(815) 874-5556
Company Contact Name: EH&S Department.
Emergency phone number: INFOTRAC 24 Hour Emergency Numbers:
USA, Canada, Puerto Rico (800) 535-5053.
International (352) 323-3500.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards
Flammable liquids, Category 4.

Health hazards
Skin corrosion/irritation, Category 2.
Aspiration Hazard, Category 1.
Specific target organ toxicity (repeated exposure), Category 2.

Environmental hazards
Hazardous to the aquatic environment, chronic toxicity, Category 2.

GHS Signal word: DANGER.

GHS Hazard statement(s):
Combustible liquid.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.
GHS Hazard symbol(s):

GHS Precautionary statement(s):


Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Do NOT induce vomiting. Take off contaminated clothing and wash before reuse. In case of fire: Use dry chemical, carbon dioxide, or foam for extinction. Collect spillage.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents/containers to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Hazard(s) not otherwise Classified (HNOC): Electrostatic charge may be generated during pumping and other operations.

Percentage of ingredient(s) of unknown acute toxicity: < 90% of the mixture consists of ingredients of unknown acute toxicity (oral/dermal/inhalation).
SECTION 3: Composition/information on ingredients

Mixture:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Concentration (weight %)</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, hydrotreated middle</td>
<td>&lt; 50 %</td>
<td>64742-46-7</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>&lt; 20 %</td>
<td>64742-47-8</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light</td>
<td>&lt; 20 %</td>
<td>64742-53-6</td>
</tr>
</tbody>
</table>

All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First-aid Measures

Inhalation: First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

Skin contact: Skin Contact: Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician. (see Indication of immediate medical attention and special treatment needed).

Eye contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most important symptoms/effects, acute and delayed: While significant vapor concentrations are not likely, high concentrations can cause minor respiratory irritation, headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Ingestion can cause irritation of the digestive tract, nausea, diarrhea, and vomiting. Dry skin and possible irritation with repeated or prolonged exposure. Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea.
**Indication of immediate medical attention and special treatment needed:** Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. When using high-pressure equipment, injection of product under the skin can occur. In this case, the casualty should be sent immediately to the hospital. Do not wait for symptoms to develop. High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. These injuries often require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury. Early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

**SECTION 5: Fire-fighting measures**

**Suitable extinguishing media:** Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Unsuitable extinguishing media:** Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**Specific hazards arising from the chemical:**

Unusual Fire & Explosion Hazards: Combustible. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). May create vapor/air explosion hazard if heated. This product will float and can be reignited on surface water. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may also be formed.

**Special protective equipment and precautions for fire-fighters:** Special protective actions for firefighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Combustible. Keep all sources of ignition away from spill/release. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Avoid direct contact
with material. For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Environmental Precautions:** Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center).

**Methods and material for containment and cleaning up:** Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations. Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

**SECTION 7: Handling and Storage**

**Precautions for safe handling:** Keep away from ignition sources such as heat/sparks/open flame – No smoking. Take precautionary measures against static discharge. Non sparking tools should be used. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Do not breathe vapors or mists. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Static Accumulation Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding of tanks, transfer piping, and storage tank level floats are necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. Special care should be given to ensure that special slow load procedures for "switch loading" are followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha). For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Revision Date: February 20, 2015
High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment. Spills will produce very slippery surfaces. Open container slowly to relieve any pressure. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-70 and/or API RP 2003 for specific bonding/grounding requirements. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames.

**Conditions for safe storage, including any incompatibles:** Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**SECTION 8: Exposure controls/personal protection**

**Control Parameters:**

**Occupational exposure limits:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL-TWA (8 hour)</th>
<th>PEL- STEL (15 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, hydrotreated middle</td>
<td>5 mg/m³</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light</td>
<td>TWA: 5 mg/m³ as Oil Mist, if Generated</td>
<td>No data available</td>
</tr>
<tr>
<td>naphthenic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### US ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Substance</th>
<th>TLV-TWA (8 hour)</th>
<th>TLV-STEI (15 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, hydrotreated middle</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>200 mg/m³ Skin based on Kerosene 8008-20-6</td>
<td>No data available</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light naphthenic</td>
<td>5 mg/m³ as Oil Mist, if Generated</td>
<td>10 mg/m³ as Oil Mist, if Generated</td>
</tr>
</tbody>
</table>

### Other Exposure Limits

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, hydrotreated middle</td>
<td>(Phillips 66 Guidelines) TWA: 100 mg/m³</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light naphthenic</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

**Individual protection measures, such as personal protective equipment:**

**Eye/face protection:** The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

**Skin and Hand protection:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Depending on exposure and use conditions, additional protection may be necessary to prevent skin contact including use of items such as chemical resistant boots, aprons, arm covers, hoods, coveralls, or encapsulated suits. Nitrile.

**Respiratory protection:** Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's
instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

**Other:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

**Thermal hazards:** No data available.

### SECTION 9: Physical and chemical properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

**Appearance**

**Physical state:** Liquid

**Form:** Liquid

**Color:** Red

**Odor:** Petroleum

**Odor threshold:** No data available

**pH:** Not applicable

**Melting point/freezing point:** No data available

**Initial Boiling Point/Range:** No data available

**Flash point:** 180 °F / 82 °C Test Method: Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010

**Evaporation rate:** No data available

**Flammability (solid, gas):** Not applicable

**Upper/lower flammability or explosive limits**

- **Flammability limit – lower (%):** No data available
- **Flammability limit – upper (%):** No data available
- **Explosive limit – lower (%):** No data available
- **Explosive limit – upper (%):** No data available

**Vapor pressure:** <0.01 mm Hg

**Vapor density:** >1

**Specific gravity:** 0.8708 @ 60/60°F (15.6°C)

**Solubility in water:** Negligible

**Partition coefficient (n-octanol/water):** No data available.

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** 4.9 cSt @ 100°C; 13.5 cSt @ 40°C

**Other information:**

- **Particle Size:** Not applicable
- **Percent Volatile:** Negligible
- **VOC Content(%):** 53
- **Bulk Density:** No data
- **Pour Point:** < -76°F / < -60°C
SECTION 10: Stability and Reactivity

Reactivity: Not chemically reactive.
Chemical stability: Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions: Hazardous reactions not anticipated.
Conditions to avoid: Conditions to avoid: Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.
Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.
Hazardous decomposition Products: Not anticipated under normal conditions of use.

SECTION 11: Toxicological information

Information on likely routes of exposure:

- **Inhalation:** Unlikely to be harmful
- **Ingestion:** Unlikely to be harmful
- **Skin:** Unlikely to be harmful

Symptoms related to the physical, chemical, and toxicological characteristics:
None known.

Delayed and immediate effects and chronic effects from short or long-term exposure:
None known.

Acute toxicity:

**Ingredient Information:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test Type (species)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, hydrotreated middle</td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; Oral (Rat)</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; Dermal (Rabbit)</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt; Inhalation (Rat)</td>
<td>4600 mg/m³ (4h)</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; Oral (Rat)</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; Dermal (Rabbit)</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt; Inhalation (Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light naphthenic</td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; Oral (Rat)</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD&lt;sub&gt;50&lt;/sub&gt; Dermal (Rabbit)</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt; Inhalation (Rat)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Product Acute Toxicity Estimates:**
Acute Oral Toxicity (rat) - > 5 g/kg (estimated).
Acute Dermal Toxicity (rabbit) - > 2 g/kg (estimated).
Acute Inhalation Toxicity - >5 mg/L (mist, estimated).
Skin corrosion/irritation: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation: Causes mild eye irritation.

Respiratory sensitization: No information available.

Skin sensitization: Not expected to be a skin sensitizer.

Germ cell mutagenicity: Not expected to cause heritable genetic effects.

Carcinogenicity: Not expected to cause cancer.

Reproductive toxicity: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

Specific target organ toxicity-
Single exposure: Not expected to cause organ effects from single exposure.

Specific target organ toxicity-
Repeat exposure: May cause damage to organs through prolonged or repeated exposure. Based on component information.

Aspiration hazard: May be fatal if swallowed and enters airways.

Further information: No data available

Information on Toxicological Effects of Components

Distillates, petroleum, hydrotreated middle
Carcinogenicity: Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation.

Target Organs: Repeated dermal application of petroleum gas oils for 90 days resulted in decreased liver, thymus, and spleen weights, and altered bone marrow function. Microscopic alterations included liver hypertrophy and necrosis, decreased hematopoiesis and lymphocyte depletion.

Petroleum distillates, hydrotreated light
Reproductive Toxicity: Hydrodesulfurized kerosene applied to the skin of female rats at 494, 330, or 165 mg/kg daily for 7 consecutive weeks (premating, mating, and gestation), or for 8 consecutive weeks in males did not result in systemic, reproductive, or developmental toxicity. Distillates, petroleum, hydrotreated light naphthenic
**Carcinogenicity:** This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

**Distillates, petroleum, hydrotreated heavy paraffinic**

**Carcinogenicity:** This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

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## SECTION 12: Ecological information

**Ecotoxicity:**

**Product data:**
Toxic to aquatic life with long lasting effects.

**Ingredient Information:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test Type</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, petroleum, hydrotreated middle</td>
<td>LL50</td>
<td>Fish</td>
<td>LL50 74 mg/L</td>
</tr>
<tr>
<td></td>
<td>NOEL</td>
<td></td>
<td>NOEL 0.069 mg/L</td>
</tr>
<tr>
<td></td>
<td>NOEL</td>
<td>Invertebrate</td>
<td>NOEL 0.163 mg/L</td>
</tr>
<tr>
<td></td>
<td>EL50</td>
<td>Algae</td>
<td>EL50 1.714 mg/L (72h)</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>NOEC</td>
<td>Fish Pimephales promelas</td>
<td>NOEC --&gt; 1000 mg/l (7d)</td>
</tr>
<tr>
<td></td>
<td>LL/EL/IL50</td>
<td>Aquatic organisms</td>
<td>LL/EL/IL50 &gt; 100 mg/l (21d)</td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Algae</td>
<td>EC50 --&gt; 1000 mg/l (96h)</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated light naphthenic</td>
<td>NOELR</td>
<td>Fish</td>
<td>NOEL --&gt; 1000 mg/l (14d)</td>
</tr>
<tr>
<td></td>
<td>LL50</td>
<td></td>
<td>LL50 &gt; 100 mg/L (96h)</td>
</tr>
<tr>
<td></td>
<td>NOEL</td>
<td>Invertebrate</td>
<td>NOEL 10 mg/L (21d)</td>
</tr>
<tr>
<td></td>
<td>LL50</td>
<td></td>
<td>LL50 &gt; 10000 mg/L (24h)</td>
</tr>
<tr>
<td></td>
<td>NOEL</td>
<td>Algae</td>
<td>NOEL &gt;= 100 mg/L (72h)</td>
</tr>
</tbody>
</table>

**Toxicity:** Experimental studies of gas oils show that acute aquatic toxicity values are typically in the range 2-20 mg/L. These values are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions. They should be regarded as toxic to aquatic organisms, with the potential to cause long term adverse effects in the aquatic environment.

**Persistence and Degradability:** Gas oils are complex combinations of individual hydrocarbon species. Based on the known or expected properties of individual constituents, category members are not predicted to be readily biodegradable. Some hydrocarbon constituents of gas oils are predicted to meet the criteria for persistence; on the other hand,
some components can be easily degraded by microorganisms under aerobic conditions.

**Bioaccumulative Potential:** Gas oil components have measured or calculated Log Kow values in the range of 3.9 to 6 which indicates a high potential to bioaccumulate. Lower molecular weight compounds are readily metabolized and the actual bioaccumulation potential of higher molecular weight compounds is limited by the low water solubility and large molecular size.

**Mobility in Soil:** Releases to water will result in a hydrocarbon film floating and spreading on the surface. For the lighter components, volatilization is an important loss process and reduces the hazard to aquatic organisms. In air, the hydrocarbon vapors react readily with hydroxyl radicals with half-lives of less than one day. Photoxidation on the water surface is also a significant loss process particularly for polycyclic aromatic compounds. In water, the majority of components will be adsorbed on sediment. Adsorption is the most predominant physical process on release to soil. Adsorbed hydrocarbons will slowly degrade in both water and soil.

**Other adverse effects:** None anticipated.

**SECTION 13: Disposal considerations**

**Disposal instructions:**
The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste. This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever possible, Recycle used oil in accordance with applicable federal and state or local regulations. Container contents should be completely used and containers should be emptied prior to discard.

**SECTION 14: Transport Information**

**U.S. Department of Transportation (DOT)**

**Shipping Description:**
Shipping description is for bulk shipments only [container size > 450 L (119 gal)].
Non-Bulk shipments are not regulated unless classified as Marine Pollutant and shipped by water mode.
UN1268, Petroleum distillates, n.o.s., Combustible liquid III

**Non-Bulk Package Marking:**
Not Regulated [49 CFR 173.150(f)(2)]

**Non-Bulk Package Labeling:**
Not Regulated [49 CFR 173.150(f)(2)]
**Bulk Package/Placard Marking:** Combustible / 1268

**Packaging - References:** None; None; 49 CFR 173.241 (Exceptions; Non-bulk; Bulk)

**Hazardous Substance:** See Section 15 for RQ’s

**Emergency Response Guide:** 128

**Note:** If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil).

**International Maritime Dangerous Goods (IMDG)**

**Shipping Description:** Not regulated. Flash point is above 60°C, cc. Not regulated

**Note:** U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25. If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL Annex I.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**
Not applicable

**International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)**

**UN/ID #:** Not regulated. Flash point is above 60°C, cc. Not regulated

**Note:** U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 24.

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**SECTION 15: Regulatory Information**

USA:

**United States Federal Regulations:** This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

**Toxic Substances Control Act (TSCA)** – All substances in this product are listed, as required, on the TSCA inventory.

**SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:**
Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**CERCLA Hazardous Substance List, 40 CFR 302.4:** This product contains chemicals listed on CERCLA. None

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):** None

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):** None
SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None

Section 311/312 (40 CFR 370):
Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire Hazard: Yes
Pressure Hazard: No
Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):
None

U.S. Export Control Classification Number: EAR99

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.


Massachusetts Right to Know: Distillates, petroleum, hydrotreated light naphthenic (as Transformer Oil) is listed on the Massachusetts Right to Know List.

Minnesota Hazardous Substance List: Petroleum distillates, hydrotreated light (as Stoddard Solvent) and Distillates, petroleum, hydrotreated light naphthenic (as mineral oil) are listed on the Minnesota Hazardous Substance List.

New Jersey Right to Know: Distillates, petroleum, hydrotreated light naphthenic (as Petroleum Oil) is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Petroleum distillates, hydrotreated light (as Stoddard Solvent) and Distillates, petroleum, hydrotreated light naphthenic (as Transformer Oil) are listed on the Pennsylvania Right to Know List.

Rhode Island Hazardous Substance List: Petroleum distillates, hydrotreated light (as Stoddard Solvent) and Distillates, petroleum, hydrotreated light naphthenic (as Transformer Oil) are listed on the Rhode Island Hazardous Substance List.

Canada WHMIS Hazard Class: B3 - Combustible liquid, D2B - Toxic materials.

SECTION 16: Other Information

Revision Date: February 20, 2015
To the best of our knowledge, the information contained herein is accurate. However SPX Hydraulic Technologies does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.