SECTION 1: PRODUCT IDENTIFICATION

Product Name: On-Spec Used Oil

Synonym: Used Oil, Used Oil Fuel, #4 Oil, Waste Oil

Product Number: UO-001

Formula: Hydrocarbon mixture

SECTION 2: COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Oils</td>
<td>Mixture</td>
<td>80 – 100%</td>
</tr>
<tr>
<td>Water</td>
<td>NA</td>
<td>0 – 20%</td>
</tr>
<tr>
<td>Diesel Fuel</td>
<td>68476-34-8</td>
<td>0 – 5%</td>
</tr>
<tr>
<td>Gasoline</td>
<td>6474-46-4</td>
<td>0 – 1%</td>
</tr>
<tr>
<td>Aromatic Hydrocarbons (solvents)</td>
<td>NA</td>
<td>&lt; 0.5%</td>
</tr>
<tr>
<td>Chlorinated Paraffins</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>NA</td>
<td>Trace</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

Eye Contact: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation or allergic skin response. This material is not expected to be harmful to internal organs if absorbed thorough the skin.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

Medical Conditions Aggravated: Pre-existing dermatitis may be aggravated.
SECTION 4: FIRST AID MEASURES

Eye Contact: Flush eye immediately with fresh water. Remove contact lenses if worn. Eyelids should be held away from the eyeball to ensure thorough rinsing. This material is not expected to cause prolonged or significant eye irritation. In the event irritation persists, seek medical attention.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove material from skin, use soap and water. Discard contaminated clothing and shoe or thoroughly clean before reuse.

Ingestion: No specific first aid measure required. Do not induce vomiting. As a precaution get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties: Not classified by OSHA as flammable or combustible material.

Flash Point: Tag Closed Cup = 210 °F - 275 °F
Flammable Limits: LEL – Not Applicable  UEL – Not applicable
Autoignition: No data available

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, unburned hydrocarbons and oxides of sulfur, zinc and/or nitrogen.

Extinguishing Media: Use dry chemical, carbon dioxide, water fog, or foam to extinguish all fires.

Fire Fighting Instructions: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Use a smothering technique to extinguish a combustible liquid fire. Do not force water stream directly on oil fires, as this will scatter the fire. Use a water fog to cool fire-exposed containers, structures, and to protect personnel.
SECTION 6: ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all source of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if it can be done without risk. Contain release to prevent further contamination of soil, surface water or groundwater. DO NOT flush down public sewers or other drainage systems. Place contaminated materials in appropriate containers and dispose of in accordance with local, state, and federal regulations. Store in a cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles.

Spill Reporting: The Clean Water Act requires the reporting of any discharge of oil or petroleum (in any form) into surface waters. **Immediately** call the national Emergency Response Center at 1-800-424-8802.

SECTION 7: HANDLING AND STORAGE

Handling: To avoid contamination of product keep containers closed when not in use. Empty containers retain product residues (solid, liquid, and/or vapor) that can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to flames, sparks, heat or other potential ignitions sources. Empty containers should be completely drained, properly closed, and promptly returned to drum reconditioner or disposed of properly.

Storage: Keep containers closed when not in use. Store in a cool, dry well-ventilated area. Do not store with strong oxidizing agents. Keep away from open flames and high temperatures.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use in a well-ventilated area. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). Have an eye wash station readily available where eye contact can occur.

Personal Protective Equipment: Personal protective equipment (PPE) selections vary based on the potential exposure conditions such as handling practices, concentration and ventilation. At a minimum safety glasses and skin protection should be worn. Additional PPE may be required based on specific working conditions.

Eye Protection: Safety glasses equipped with side shields are recommended for minimal protection. Wear goggles if splashing or spraying for added protection in the event splashing or spraying is expected.

Hand Protection: Incidental contact with oil does not require hand protection. If frequent or prolonged exposure is expected chemical resistant gloves should be worn. Gloves should be nitrile, neoprene, or vinyl.
Skin Protection: Uniforms or coveralls should provide adequate protection under normal working conditions. If prolonged contact is unavoidable, wear protective clothing made of polyvinyl alcohol (PVA), polyvinyl chloride (PVC), neoprene, or nitrile. Remove oil contaminated clothing and launder before reuse. Heavily contaminate clothing and leather goods should be removed promptly and cleaned or discarded.

Respiratory Protection: Under normal use, respiratory protection is not required. If the engineering controls do not maintain airborne concentrations at a level which is adequate to protect the health of the employee, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be worn. Respirator selection, use, and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Occupational Exposure Guidelines:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Applicable Workplace Exposure Levels</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Mist, Mineral</td>
<td>TWA: 5 mg/m³  STEL: 10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel Fuel Mist</td>
<td>TWA: 5 mg/m³  STEL: 10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline</td>
<td>TWA: 300 ppm  STEL: NE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NE = Not Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Light brown to black</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild petroleum hydrocarbon</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>180 – 220 °F</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>NA</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt;0.1 mmHg @ 68 °F</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt;1.0 (H₂O = 1)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.85 – 0.88 (H₂O = 1)</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Hazardous</td>
<td>Not expected to occur.</td>
</tr>
<tr>
<td>Polymerization</td>
<td></td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Keep away from extreme heat, sparks, open flames, and strong oxidizers.</td>
</tr>
</tbody>
</table>
Incompatibility with Other Materials: May react with strong acids or strong oxidizing agents such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: No additional hazardous decomposition products other than those identified in Section 5 of this MSDS.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Symptoms of Exposure:

Inhalation: High concentrations of aerosol or mist may be generated at high temperatures and may be irritating to the respiratory tract, including nose and throat, and may cause difficulty breathing. This may be particularly true with people who have a high level of sensitivity and allergic reactions.

Ingestion: May cause mild irritation of the digestive tract, including cramping, diarrhea, nausea, and vomiting. Aspiration into the lungs – by initial ingestion or vomiting – may cause mild to severe pulmonary injury.

Skin: Prolongs and/or repeated exposure may cause mild skin irritation, including redness, burning, temporary drying/cracking, and acute dermatitis. Contact with hot material may cause burns.

Eyes: Contact may cause slight to moderate irritation, including burning, redness, and tearing. Contact with hot oil may cause thermal burns.

Chronic Symptoms of Exposure:

Inhalation: Exposure to high levels of oil mist concentration may lead to chronic pulmonary conditions such as chronic bronchitis, pneumonia, and emphysema.

Skin: Cracking, drying, and chronic dermatitis.

SECTION 12: ECOLOGICAL INFORMATION

This material may be harmful to human, animal, and aquatic life is spilled on soil or in water. Petroleum products can be harmful or fatal to aquatic life and waterfowl. Oil is persistent and does not readily biodegrade.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of collected material must comply with federal, state and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to federal, state and local regulations for regulated waste transport and disposal. The responsibility for proper waste disposal lies with the owner of the waste. Contact your ESI representative regarding proper recycling or disposal.
SECTION 14: TRANSPORTATION INFORMATION

This material is not regulated by the US DOT and therefore not subject to the regulations in 49 CFR Parts 171 – 180. This product is oil and regulated under 49 CFR 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.

SECTION 15: REGULATORY INFORMATION

TSCA Inventory
Components of this material are listed on the Toxic Substances Control Act Inventory.

SARA 302/304 Emergency Planning and Notification
The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for “Extremely Hazardous Substances” listed in 40 CFR 302.4 and 40 CFR 355.

There are no components in this product on the SARA 302 list.

SARA 311/312 Hazard Identification
The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 311 and 312 to submit aggregate information on chemical by “Hazard Category” as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

- Immediate Acute Health Effects: No
- Delayed (Chronic) Health Effects: Yes
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: No
- Reactivity Hazard: No

SARA 313 Toxic Chemical Notification and Release Reporting
This product contains no SARA 313 reportable chemicals.

CERCLA
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of “hazardous substances” equal to or greater than the reportable quantities (RQs) including petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances that may present in this product are subject to CERCLA, these include the components of gasoline (benzene, toluene, xylene, ethylbenzene, and 1,2,4-trimethylbenzene. The concentration of each regulated material is expected to be <1%. Zinc and zinc compounds may also be present in concentrations <0.1%.
SECTION 16: OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Ratings:</th>
<th>Health: 0</th>
<th>Flammability: 1</th>
<th>Reactivity: 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS Ratings:</td>
<td>Health: 1</td>
<td>Flammability: 1</td>
<td>Reactivity: 0</td>
</tr>
</tbody>
</table>

0 – Least, 1 – Slight, 2 – Moderate, 3 – High, 4 – Extreme

These values are obtained using the guidelines or published evaluations by the National Fire Protection Association (NFPA) of the National Paint and Coating Association (for HMIS ratings).

LABEL RECOMMENDATION: ON-SPEC USED OIL

NOTICE: The information herein is based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.