Safety Data Sheet

SANTOLUBES LLC
SANTOTRAC, SANTOVAC, SANTOLUBES, AND SYNERGY
P. O. Box 6740
Spartanburg, SC 29304

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME: SANTOVAC OS-138® POLYPHENYL ETHER LUBRICANT
CAS Number 3705-62-2
Identified Uses:
Company/Undertaking Identification: SantoLubes LLC
PO Box 6740
Spartanburg, SC 29304

E-Mail (competent person): safetydatasheets@santolubes.com
Information Contact: 864-585-3661
Emergency Telephone:
FOR CHEMICAL EMERGENCY, Call CHEMTREC – 1-800-424-9300 or 703-527-3887.

2. HAZARDS IDENTIFICATION

Physical hazards Flammable liquid - Not Classified
Health hazards Skin irritation – Not Classified
Eye irritation – Not Classified
Specific target organ toxicity – Not Classified
Environmental hazards Not classified.

Label elements
Pictogram NA
Signal word NA
Hazard statement(s) NA
Precautionary Statement(s) NA

Hazard(s) not otherwise classified (HNOC)
Eye contact - No more than slightly irritating based on toxicity studies.
Skin contact - No more than slightly toxic or slightly irritating based on toxicity studies.
Ingestion - No more than slightly toxic based on toxicity tests. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.
Inhalation - No information available

Supplemental information None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name EC number CAS number %
Not Applicable
4. FIRST AID MEASURES

Inhalation If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Skin contact Immediate first aid is not likely to be required. However, this material can be removed with water. Wash heavily contaminated clothing before reuse.

Eye contact Immediate first aid is not likely to be required. However, this material can be removed with water. Wash eyes if exposed.

Ingestion Immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for advice. Wash heavily contaminated clothing before reuse.

Most important symptoms/effects, acute and delayed See Section 11.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Contact physician if discomfort continues.

5. FIRE FIGHTING MEASURES

Extinguishing media: Dry chemicals, alcohol resistant foam, carbon dioxide (CO2), water spray or fog. Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Carbon oxides, hydrocarbons.

Special protective equipment and precautions for firefighters: Fire fighters and others exposed to products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

General fire hazards: No data available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: For personal protection see section 8.

Environmental precautions: Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container.

Methods for cleaning up: Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities: Product is stable under normal conditions of storage and handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

General advice: These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Appropriate engineering controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Individual protection measures, such as personal protective equipment

Eye/face protection: This product does not cause significant eye irritation or eye toxicity requiring special protection.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Viscous liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>570°F (COC)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>LEL: 1.0; UEL 8  (note: approximate)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>1-2 mm Hg @316°C (approximate)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Approximately 17 (air=1)</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>approx. 1.2 (@25 °C)</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Less than 0.001% (@25 °C)</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>1170°F (note: approximate)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Approx: 2000 @ 100°F; 23 @ 210°F</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Heat; flames and sparks.

Incompatible materials: Strong oxidizing agents.

Thermal decomposition: No data available

Hazardous decomposition products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Toxicological data: Data from laboratory studies with OS 138 polyphenyl ether lubricant are summarized below:

Single exposure (acute) studies indicate:

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Practically Nontoxic</td>
<td>(Rat LD50 &gt; 15,800 mg/kg)</td>
</tr>
<tr>
<td>Dermal</td>
<td>Practically Nontoxic</td>
<td>(Rabbit LD50 &gt; 7,940 mg/kg)</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>Practically Nonirritating</td>
<td>(Rabbit, 0.8/110.0)</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>Nonirritating</td>
<td>(Rabbit, 24-hr exposure, 0.0/8.0)</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

Acute and prolonged toxicity to fish: No data
Acute Toxicity to Aquatic Invertebrates: No data
Environmental fate and pathways: No data

13. DISPOSAL CONSIDERATIONS

Emergency Spill and Leak Information: Spills should be absorbed on a suitable medium such as sawdust, clay or filtercel and disposed of as recommended below.

Disposal Information: This material when discarded is not a hazardous waste as defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dispose of by all federal, state and local environmental regulations. Recommended method of disposal is by high temperature incineration in a RCRA approved TSDF.

14. TRANSPORT INFORMATION

DOT Not applicable

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 (SARA)

<table>
<thead>
<tr>
<th>Hazard categories</th>
<th>Immediate Hazard</th>
<th>Delayed Hazard</th>
<th>Fire Hazard</th>
<th>Pressure Hazard</th>
<th>Reactivity Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Listed</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

US. California Proposition 65 Not Listed.

16. OTHER INFORMATION

HAZARD RATING SYSTEMS:

This is for people trained in National Paint & Coatings Association’s (NPCA) Hazardous Materials Identification System (HMIS) and National Fire Protection Association (NFPA 704).

**NPCA-HMIS**

- **SANTOVAC® OS-138**
  - 0 = HEALTH
  - 1 = FLAMMABILITY
  - 0 = REACTIVITY
  - 4 = PROTECTIVE EQUIPMENT

**NFPA 704**

- **Flammability**
- **Health**
- **Reactivity**
- **Other Hazard**

| HAZARD INDEX | 0 = Minimal Hazard | 1 = Slight Hazard | 2 = Moderate Hazard | 3 = Serious Hazard | 4 = Severe Hazard |

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