1. Product and Company Identification

Product Name
Lubricit SMO

Product CAS Number (if applicable)
1338-43-8

Product Type, Usage, or Industry
Sorbitan monooleate

Company Information
Zschimmer and Schwarz, Inc.
70 GA Hwy. 22 W
Milledgeville, GA 31061

Emergency Contact
Company: (478) 454-1942
CHEMTREC: (800) 424-9300

2. Hazardous Composition and Information

This section contains hazardous components which comprise 1.0% or more of the formula; carcinogens are listed at 0.1% or greater.

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Material or component</th>
<th>Avg % weight</th>
</tr>
</thead>
</table>

This is not intended to be a complete compositional disclosure. Information provided pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

3. Hazards identification

HMIS Rating:
Health: 0  Fire: 1  Reactivity: 0  PPE: X

Primary routes of exposure:

**Eyes:** Prolonged and repeated contact may cause redness and mild irritation.
**Skin:** Prolonged and repeated contact may cause itching and redness.
**Inhalation:** No known respiratory hazards.
**Ingestion:** Large amounts may cause discomfort or gastrointestinal distress.
4. First Aid Measures

Eyes:
Flush with copious amounts of water for 15 min. If irritation persists, contact a physician.

Skin:
Wash affected area with soap and water. If itching or redness persists seek medical attention. Contaminated clothing should be removed immediately and washed before reuse. Contaminated shoes should be discarded.

Inhalation:
Move the person to fresh air. If breathing becomes difficult, contact a physician.

Ingestion:
Do not induce vomiting. Give 1 to 2 glasses of water. Contact a physician.

5. Firefighting Measures

Flash point: > 300°F (149°C)
Flammability limits: Lel: N/D. Uel: N/D
Suitable extinguishing media: alcohol-resistant foam; dry powder; CO2
Special protective equipment for firefighters: Self-contained breathing apparatus and protective clothing when fighting any chemical fire.

Unusual fire & explosion Hazards:
None known.

6. Accidental Release Measures

Personal precautions:
Avoid contact with eyes and skin. Area will become slippery. Keep unnecessary personnel away.

Environmental precautions
Limit leakage with earth or sand. Do not discharge into the drains/surface water/ground water. Dispose of absorbed material in accordance with local, state and federal regulations.

Methods for cleaning up/taking up
Take up with absorbent material. (e.g. earth or sand.) Dispose of absorbed material in accordance with local, state, and federal regulations. After cleaning, trace amounts may be flushed away with water containing detergent.
7. Handling and Storage

Advice on safe handling  
Keep container closed. Avoid getting on skin or in eyes when handling product. Otherwise, no special measures necessary.

Advice on protection against fire and explosion  
No special measures necessary.

Requirements for storage rooms and vessels  
Store in cool dry places.

8. Exposure Controls and Personal Protective Equipment

Component with OSHA exposure limits to be monitored

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Description of substance</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General protective measures / hygiene measures:
Observe the usual precautions when handling chemicals.

Hand protection: Use impervious gloves
Eye protection: Safety glasses with side shields
Respiratory protection: None needed under normal conditions.
Skin protection: Protective clothing
Ventilation: Recommended
Local Exhaust: Recommended.
Other Protective Equipment: Eye-wash station

9. Physical and Chemical Characteristics

Form and Appearance: Clear to slightly hazy, yellow to amber liquid
Odor: Characteristic
Boiling point: ~ 212°F (100°C)
Freezing point: N/D
pH: N/D
Specific gravity/Bulk Density: ~ 1.0
Flash point: > 300°F (149°C)
Viscosity: N/D
Solubility in water: Insoluble
Vapor pressure: N/D
10. Stability and Reactivity

**Chemical stability:** Product is stable under ordinary conditions of use and storage.

**Conditions to avoid:** None known.

**Incompatibility:** To strong oxidizers.

**Hazardous decomposition products:** None known.

**Hazardous polymerization:** Will not occur.

11. Toxicological Information

**Acute Toxicity:**

**Eyes:** Draize test, rabbit, eye, 7 days: Practically nonirritating.

**Ingestion:** LD50 (rat): >39.8 g/kg 14 days: Relatively harmless.

**Skin:** Draize test, rabbit, skin, 72 hours: Nonirritating.

**Chronic Health Effects:** None.

The product has not been tested. The information is derived from the properties of the individual components.

12. Ecological Information

**Ecotoxicity:** LC50 (Rainbow trout): > 1000mg/L 96H.

**Environmental fate:** This product is substantially biodegradable in water.

13. Disposal Considerations

Dispose of absorbed material in accordance with local, state, and federal regulations.
14. Transport Regulations

DOT Regulations:

- **Proper Shipping Name:** Not regulated.
- **Hazard Class:** Not regulated.
- **UN Number:** Not regulated.
- **Packing Group:** Not regulated.
- **Label Required:** Not regulated

15. Regulatory Information

Contents of this MSDS comply with the OSHA standard 29 CFR 1910.1200.
TSCA Status: All the components in this material are listed under TSCA inventory.

- **EPA SARA Title 302:** None.
- **EPA Section 304 CERCLA Hazardous substance:** None
- **EPA Section 311/312 Hazard Categorization:**
  - Acute: None
  - Chronic: None
  - Fire: None
  - Pressure: None
  - Reactive: None

- **EPA Section 313 Toxic chemicals:** None
- **State hazardous information:** None

16. Additional Information

This information is based on our present state of knowledge. It should not be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Existing acts and regulations must be observed by the recipient of our products under their own responsibility.