WS 6900

PREMIUM HIGH PERFORMANCE BIOSTABLE MICRO-SOLUBLE

WS 6900 is a high performance, micro-emulsion for machining and grinding of ferrous and non-ferrous metals. The most advanced bioresistant additive technologies provide the highest level of performance in controlling bacteria and fungus, and eliminating odors. WS 6900 extends sump life 3-4 times over that of conventional products, dramatically reduces waste disposal costs and changeover costs, and offers exceptional tool life to reduce tooling costs.

WS 6900 offers a safer and friendlier alternative to high performance semi-synthetics and synthetics. WS 6900 is operator and machine friendly. It fulfills the warranty requirements of many tool manufacturers that now require the metal cutting fluid concentrate contain at least 40% oil for performance and machine maintenance benefits.

PERFORMANCE BENEFITS

- Universal Fluid for a wide range of metals, and operations including: Tough Stainless alloys, Cast Aluminum alloys, Ferrous metals, & Cast iron.
- Durable, long lasting fluid makes it ideal for both central systems and individual sumps. Reduces waste disposal and changeover costs.
- Not a semi-synthetic - totally mineral oil based. Non sticky – protects against fouling valves and switches: to reduce downtime and maintenance costs.
- Foam control makes it ideal for both high-speed CNC and grinding operations.
- Excellent rust and corrosion protection for inner workings of the machine tool, machine ways, and machined parts.
- Extreme pressure lubrication extends tool life and provides good finish.
- Rejects all tramp oil for easy skimming.
- Very Operator Friendly with high operator acceptance.

TYPICAL OPERATIONS
- Tapping
- Threading
- Honing
- Broaching
- Milling
- Boring
- Deep hole drilling
- Grinding

RECOMMENDED
- Grinding 4-6%
- Machining 6-8%
- Severe machining 8-12%

TYPICAL PROPERTIES
- Appearance of emulsion: Translucent blue or white fluid
- PH @ 5%: 8.4
- Oil Content: 45%
- Sulfur: No
## SECTION 4 - REACTIVITY HAZARD DATA

<table>
<thead>
<tr>
<th>Stability</th>
<th>Conditions to Avoid</th>
<th>Hazardous Decomposition Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Stable</td>
<td>N.A.</td>
<td>Oxides of carbon and nitrogen; hydrogen chloride.</td>
</tr>
</tbody>
</table>

**HAZARDOUS POLYMERIZATION**
Will not occur

### SECTION 5 - HEALTH HAZARD DATA

<table>
<thead>
<tr>
<th>Primary Routes of Entry</th>
<th>Eye</th>
<th>Skin</th>
<th>Inhalation</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct contact may cause eye irritation. Oil mist may irritate respiratory tract. Prolonged or repeated skin contact may cause mild skin irritation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not listed in NTP, OSHA, or IARC Monographs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 6 - CONTROL AND PROTECTIVE MEASURES

**Respiratory Protection** Normally not needed unless oil mist is present

**Protective Gloves** Oil/Chemical resistant

**Eye Protection**

**Safety Glasses** N.A.

**VENTILATION**

**TO BE USED** Local Exhaust

**Other (Specify)** Use local exhaust if PEL/TLV is exceeded

**Other Protective Equipment**

**Clothing and Equipment**

**Hygiene** Follow good industrial hygiene practices.

### SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

**Steps to be Taken If Material Spilled or Released** Recover free liquid, add absorbent to spill area.

**Waste Disposal** Dispose of in accordance with all applicable federal, state, and local regulations.

**Precautions to be Taken in Handling and Storage** Store away from direct heat source. Do not mix or store with strong oxidants.

**Other Precautions and/or Special Hazards** None known

**HARM Rating**

| Health | Flammability | Reactivity | Personal Protection |
|--------|--------------|------------|---------------------|---------------------|
| 1      | 1            | 0          | B                   |
Material Safety Data Sheet

Wallower Oil Company

Manufacturer
21845 Drake Rd.
Address
Strongsville, Ohio 44149

(440) 238-8250
Phone Number (For Information)
(330) 365-8036
Emergency Phone Number

WS 6900, WS 6900C
Identity (Trade Name As Used On Label)
SYN6900

MSDS Number*

CAS Number*

Date Prepared 12/06/04
Prepared By*

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

<table>
<thead>
<tr>
<th>COMPONENTS - Chemical Name &amp; Common Names (hazardous Components 1% or greater, Carcinogens 0.1% or greater)</th>
<th>%</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillate (Mineral Oil)</td>
<td>&lt;50</td>
<td>6mg/m³</td>
<td>5mg/m³</td>
<td>STEL 10 mg/m³</td>
</tr>
</tbody>
</table>

Non-Hazardous Ingredients

TOTAL 100

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Pt</td>
<td>N.D.</td>
</tr>
<tr>
<td>Specific Gravity (H2O = 1)</td>
<td>1.0</td>
</tr>
<tr>
<td>Vapor Pressure (mm)</td>
<td>Nil</td>
</tr>
<tr>
<td>Melting Pt</td>
<td>N.A.</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Evaporation Rate (water =1)</td>
<td>Nil</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Emulsifies</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Water Reactive</td>
</tr>
</tbody>
</table>

Appearance and Odor: WS 6900 is blue. WS 6900C is an amber oily liquid.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point &amp; Method Used</td>
<td>300 °F (COG)</td>
</tr>
<tr>
<td>Flammability Limits in Air, % by Volume</td>
<td>LEL</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Foam, dry chemical or CO2 preferred</td>
</tr>
<tr>
<td>Special Fire Fighting Procedures</td>
<td>Wear self contained breathing apparatus. Avoid use of solid water streams.</td>
</tr>
<tr>
<td>Product may boil vigorously at or above 212°F.</td>
<td></td>
</tr>
</tbody>
</table>

Unusual Fire and Explosion Hazards: None known

*Optional
N.A. = Not Applicable
N.D. = Not Determined