Section 1 • Product and Company Identification

Product Name: LPS® Heavy-Duty Silicone

Part Number(s): 01516 (aerosol), 51516 (aerosol), 01505, C01516 (aerosol), C01505

Chemical Name: Petroleum Distillates

Product Use: An industrial lubricant designed to reduce mechanical wear and to extend equipment life of machinery where rubber and plastics are involved and where silicone can be tolerated.

Manufacturer Information: LPS Laboratories, 4647 Hugh Howell Road, Tucker, GA, USA 30084
TEL: USA & Canada: 1 800 241-8334
Outside USA and Canada: +1 770 243-8800
FAX: USA & Canada: 1 800 543-1563
Outside USA and Canada: +1 770 243-8899

Emergency Telephone Number: Chemtrec: USA & Canada: 1 800 424-9300
Outside USA and Canada: +1 703 527-3887

Website: http://www.lpslabs.com

Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview:

Aerosol: DANGER: Flammable. Contents under pressure. Harmful or fatal if swallowed.

Bulk: DANGER: Combustible. Harmful or fatal if swallowed.

Primary route(s) of entry: Skin and eye contact. Inhalation.

Potential Acute Health Effects:

Eyes: Irritating to eyes.

Skin: Repeated exposure may cause skin dryness or cracking.

Inhalation: Excessive inhalation of vapors can cause irritation of the respiratory tract, nausea, dizziness or headache.

Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs.
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LPS® Heavy-Duty Silicone

Revision Date: November 9, 2012 Supersedes: January 12, 2012

Potential Chronic Health Effects:
Carcinogenic Effects: NTP: No IARC: No OSHA: No ACGIH: No
Mutagenic Effects: None
Teratogenic Effects: None
Target Organs: None

Medical conditions aggravated by exposure:
Persons with pre-existing central nervous system (CNS) disease, neurological conditions, skin disorders, chronic respiratory diseases, or impaired liver or kidney function should avoid exposure.

Signs and Symptoms
Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

Section 3 • Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Weight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>10 - 25%</td>
</tr>
<tr>
<td>Liquified Petroleum Gas</td>
<td>68476-85-7</td>
<td>10 - 20%</td>
</tr>
</tbody>
</table>

Any remaining ingredients are not classified as "hazardous" per 29 CFR 1910.1200 Subpart Z.

Section 4 • First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. DO NOT use eye ointment. Seek medical attention immediately.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim’s head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.
Section 5 • Fire Fighting Measures

Products of Combustion: Carbon monoxide and carbon dioxide.

General Fire Hazards: High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.

Firefighting media:
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use CO2, water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosions.

Sensitivity to Impact: None
Sensitivity to Static Discharge: Yes

Protection Clothing (Fire):
Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles.

Section 6 • Accidental Release Measures

Containment Procedures:
Small Spill and Leak: Eliminate ignition sources. Absorb with an inert material and dispose of properly.
Large Spill and Leak: Eliminate ignition sources. Secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal.

Clean-Up Procedures: Recover free product and place in a suitable container for disposal.

Evacuation Procedures: Ventilate area of leak or spill. Keep unnecessary and unprotected people away.

Special Procedures: Remove all sources of ignition. Ventilate area. Wear personal protective equipment during cleanup.

Section 7 • Handling and Storage

Handling: DO NOT spray into or around ignition sources. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid breathing vapors or spray mists.

Storage: Keep container in a cool, well-ventilated area. Avoid all sources of ignition (spark or flame). Store between 40°F and 120°F (4.4°C and 49°C).

Precautions to be taken in handling and storage:
Store aerosols as Level 1 Aerosol (NFPA 30B). Store all materials in a dry, well-ventilated area. Avoid breathing vapors.
### Section 8 • Exposure Controls / Personal Protection

**Exposure Guidelines:**

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>5 mg/m³ (oil mist) PEL</td>
<td>5 mg/m³ (oil mist) TLV 10 mg/m³ (oil mist) STEL</td>
<td>5 mg/m³ (oil mist) TWA 10 mg/m³ (oil mist) STEL</td>
<td>171 ppm TWA</td>
</tr>
<tr>
<td>Liquified Petroleum Gas</td>
<td>68476-85-7</td>
<td>1000 ppm PEL</td>
<td>1000 ppm TLV</td>
<td>1000 ppm TWA</td>
<td>None reported</td>
</tr>
</tbody>
</table>

**Engineering Controls:** Provide general and/or local exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

**Personal protective equipment**

**Eye protection:** Safety glasses with side shields conforming to appropriate regulations.

**Hand protection:** Normally no hand protection is required; however, using chemical resistant gloves is recommended.

**Respiratory protection:** If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e. organic vapor cartridge).

**General Hygiene Considerations:** Wash thoroughly after handling. Have eye-wash facilities immediately available.
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LPS® Heavy-Duty Silicone

Revision Date: November 9, 2012
Supersedes: January 12, 2012

Section 9 • Physical and Chemical Properties

Appearance: Liquid
Color: Colorless / water-white
Odor: Characteristic
Evaporation Rate: < 1 (Ethyl Ether = 1)
Solubility Description: Emulsifies in water
Flash Point: 62°C (144°F) - dispensed liquid
Boiling Point: 100°C (212°F)
Flash Point Method: Tag-Closed Cup
Specific Gravity (H2O=1): 0.92 - 0.94 @ 20°C
Decomposition Temperature: Not established
Vapor Density (air = 1): ~6
Auto ignition temperature: > 300°C (572°F)
Vapor Pressure: 17.50 mm Hg @ 20°C
Flammable limits (estimated): LOWER: 1.3%
UPPER: 9.5%
Rule 1171 PPC: Not established
Partition Coefficient (octanol/water): < 1
V.O.C. Content: Aerosol: 31.9% per State & Federal Consumer Product Regulations
Bulk: 20.0% per State & Federal Consumer Product Regulations
Odor Threshold: Not established
Melting Point: Not established
Viscosity: 2500 - 3500 cPs @ 25°C - Bulk Only
pH: Not established
Volatiles: Not established
Heat of combustion: Aerosol: < 20 kJ/g
Bulk: < 20 kJ/g

Section 10 • Stability and Reactivity

Chemical Stability: Product is stable under recommended storage conditions.
Conditions to Avoid: Keep away from heat and ignition sources. Avoid exposure to direct sunlight for extended periods and temperatures in excess of 122°F (50°C).
Incompatibility: Extremely reactive or incompatible with oxidizing agents.
Hazardous Decomposition: Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include carbon monoxide and carbon dioxide.
Hazardous Polymerization: Will not occur.
Section 11 • Toxicological Information

A: General Product Information
Following exposure to vapors, this material can produce central nervous system depression. High atmospheric concentrations can result in eye, nasal and respiratory tract irritation. However, if handled in accordance with good industrial hygiene practice, this product will not present a significant hazard in the workplace.

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>LC-50</th>
<th>LD-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>Not established</td>
<td>&gt; 10000 mg/kg / oral*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; 3160 mg/kg / dermal*</td>
</tr>
<tr>
<td>Liquified Petroleum Gas</td>
<td>68476-85-7</td>
<td>658 mg/L / rat / 4 hr*</td>
<td>Not appropriate</td>
</tr>
</tbody>
</table>

* Supplier Data

Section 12 • Ecological Information

Mobility: Non-volatile. Readily absorbed into soil. Persistence / Degradability: Expected to biodegrade

Bioaccumulative potential: No bioaccumulation potential Other adverse effects: None known

Ecological studies have not been conducted for this product. The following information is available for component(s) of this product.

Ecotoxicity

<table>
<thead>
<tr>
<th>Effects on Organisms</th>
<th>Component</th>
<th>CASRN</th>
<th>Test</th>
<th>Species</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity on Fishes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Acute Toxicity on Daphnia</td>
<td>Naphtha (Petroleum), Hydrotreated Heavy</td>
<td>64742-48-9</td>
<td>48-hr LC50</td>
<td>Daphnia Magna</td>
<td>10 - 100 mg/L</td>
</tr>
<tr>
<td>Bacterial Inhibition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Growth inhibition of algae</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Bioaccumulation in fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Supplier Data
Section 13 • Disposal Considerations

Waste Status:  In its purchased form, the aerosol product is a RCRA hazardous waste carrying the waste codes D001 and D003 (aerosols only). The bulk material (as received) is not classified as a hazardous waste.

Disposal: Waste must be disposed of in accordance with any and all applicable environmental control rules and/or regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 • Transport Information

<table>
<thead>
<tr>
<th>D.O.T. Ground</th>
<th>Shipping Name:</th>
<th>UN No.:</th>
<th>Hazard Class:</th>
<th>Subclass:</th>
<th>Technical Name:</th>
<th>Hazard Label:</th>
<th>Packing Group:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol</td>
<td>2.1</td>
<td>NA</td>
<td>NA</td>
<td>LTD QTY</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Road/Rail - ADR/RID</th>
<th>UN No.:</th>
<th>ADR Class:</th>
<th>Subclass:</th>
<th>Technical Name:</th>
<th>Hazard ID No.:</th>
<th>Packing Group:</th>
<th>Classification Code:</th>
<th>Name and description:</th>
<th>AEROSOLS, flammable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol</td>
<td>2</td>
<td>2.1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>5F</td>
<td>AEROSOLS, flammable</td>
<td>NA</td>
</tr>
</tbody>
</table>

| IMDG-IMO | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Class: | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Hazard Label: | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY |
| Packing Group: | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Technical Name: | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| IATA - ICAO: | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Class: | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Hazard Label: | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY | LTD QTY |
| Packing Group: | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Technical Name: | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Non-aerosol versions of this product are not regulated by any mode of transportation.

The preceding information is subject to change and must be verified prior to shipment. It is the responsibility of anyone offering hazardous materials for shipment to ensure compliance with all applicable regulations.
U.S. Federal Regulations

RCRA Hazardous Waste No.: D001, D003 (aerosols only)

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):
None

Toxic Substances Control Act (TSCA):
All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories:
Sudden Release of Pressure (aerosols only), Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):
No individual section 313 component is present at or above 1%.

Section 112 Hazardous Air Pollutants (HAPs):
None

State Regulations

California:
This product does not contain chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

California and OTC States:
This product conforms to consumer product regulations.

New Jersey Right to Know:

International Regulations

Canadian Environmental Protection Act (CEPA):
All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System WHMIS:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification:
Class A, Class B5, Class D2B

Other Regulations:
Montreal Protocol listed ingredients: None
Stockholm Convention listed ingredients: None
Rotterdam Convention listed ingredients: None
RoHS Compliant: Yes
Notice to Reader:
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes 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 that exist.

Elena Badiuzzi, Compliance Manager
LPS Laboratories, a division of Illinois Tool Works