MATERIAL SAFETY DATA SHEET
SNAP® SILICONE SPRAY

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: SNAP® SILICONE SPRAY
Product Use: Lubricant
Synonyms: S630, 23230

Company Information
SOPUS Products
P.O. Box 4427
Houston, TX 77210-4427
USA

Phone Numbers
Medical Emergency: 1-800-546-6040
Transportation Emergency (USA): 1-800-424-9300
Transportation Emergency (International):
1-703-527-3887 (Call Collect)
MSDS Assistance: 1-800-546-6227
Fax On Demand: 1-800-546-6227
Technical Assistance: 1-800-458-4998
Customer Service: 1-800-468-8397
Fax Number: 713-217-3181
Internet Address: www.MSDS.PZLQS.com

2. COMPONENT INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight Percent Range</th>
<th>Hazardous in Blend</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROTREATED HEAVY NAPHTHA</td>
<td>64742-48-9</td>
<td>35 - 40</td>
<td>Yes</td>
</tr>
<tr>
<td>HEPTANE</td>
<td>142-82-5</td>
<td>35 - 40</td>
<td>Yes</td>
</tr>
<tr>
<td>BUTANE</td>
<td>106-97-8</td>
<td>10 - 25</td>
<td>Yes</td>
</tr>
<tr>
<td>PROPANE</td>
<td>74-98-6</td>
<td>10 - 25</td>
<td>Yes</td>
</tr>
<tr>
<td>POLYDIMETHYLSILOXANE</td>
<td>63148-62-9</td>
<td>1 - 5</td>
<td>No</td>
</tr>
</tbody>
</table>

This product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Hazards:
- Flammable/Combustible
- Acute Toxin
- Chronic Toxin
- Pressure
- Reactive
- Exposure Limit
- Target Organ
- Carcinogen
- Other

Other: This product contains petroleum naphthas and/or solvents which are a complex blend of light petroleum distillates.

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview
DANGER: EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE. HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL.

NFPA Ratings:  Health 1 Flammability 3 Reactivity 0

Primary Route of Exposure: Skin X Inhalation X Eye --

Health Effect Information

**Eye Contact:** Avoid eye contact. This product has not been tested for acute eye hazards. May be irritating to the eyes upon direct contact. Exposure to mists and vapors may be irritating to the eyes. These effects are transient, and complete recovery follows.

**Skin Contact:** Avoid skin contact. This product may cause slight skin irritation upon direct contact. Prolonged or repeated skin contact may result in dryness, chapping, and reddening.
Inhalation: This product is not expected to pose an inhalation hazard under conditions of foreseeable use. Caution should be taken to minimize exposure to aerosols/mists of this product. Acute and chronic overexposures may be irritating to the respiratory tract. Inhalation of high concentrations of this product can cause central nervous system depression and narcosis. Exposure to extremely high concentrations may have anesthetic effects but are completely reversible upon cessation of exposure. Intentional misuse by deliberately concentrating and inhaling this product can be harmful or fatal.

Ingestion: Do not ingest. Ingestion of small quantities is usually nonfatal unless aspiration occurs. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. Severe oral intoxication will lead to intense burning of the throat and may result in drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. Loss of consciousness and convulsions followed by death may result.

Medical Conditions Aggravated by Exposure: Drying and chapping may make the skin more susceptible to other irritants, sensitizers and disease.

Other: No information available

4. FIRST AID INFORMATION

Eye Contact: Immediately flush eyes with large amounts of water and continue flushing for 15 minutes or until irritation subsides. If irritation persists, seek medical attention.

Skin Contact: No treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. Use a hand or skin lotion to prevent dryness. If redness or irritation occurs and persists, seek medical attention.

Inhalation: If victim exhibits signs of vapor intoxication remove to fresh air. If discomfort persists seek medical attention. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. If victim is unconscious, remove to fresh air and seek immediate medical attention.

Ingestion: Do not induce vomiting due to aspiration hazard. If vomiting occurs lower head below knees to avoid aspiration. Seek immediate medical attention.

Notes to Physician: No information available

Other: No information available

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties
Flash Point (aerosol concentrate): <0 F, <-17.8 C  Test Method: ASTM D-93 (P.M.C.C.)
Flame Extension: > 18", with flashback  Test Method: CPSC 1500.45
Flammable Limits in Air
Upper Percent: No data available
Lower Percent: No data available
Autoignition Temperature: No data available  Test Method: No information available

NFPA Classification: Level 3 Aerosol (NFPA 30B)

Extinguishing Media: Use dry chemical, foam, or carbon dioxide.
Fire Fighting Measures

Special Fire Fighting Procedures and Equipment: Water may be ineffective but can be used to cool containers exposed to heat or flame to prevent vapor pressure buildup and possible container rupture.

Unusual Fire and Explosion Conditions: Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Hazardous Combustion By-Products: None

Other: No information available

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Remove all sources of ignition. Provide adequate ventilation during clean-up. Consult Health Effect Information in Section 3, Personal Protection Information in Section 8, Fire and Explosion Information in Section 5, and Stability and Reactivity Information in Section 10.

Regulatory Notifications: No notification required

Containment and Clean up: No special cleanup procedures are necessary.

Other: No information available

7. HANDLING AND STORAGE INFORMATION

Handling: Do not open or use in unventilated, enclosed or confined spaces. All ignition sources in the area should be controlled. Metal containers should be bonded and grounded prior to transferring liquid. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106-- Flammable and Combustible Liquids.

Storage: Do not transfer to unmarked containers. Store in a cool, well ventilated area in closed containers away from heat, sparks, open flame or oxidizing materials.

Empty Container Warnings

Drums: Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed. Empty containers retain product residue and can be dangerous. DO NOT PRESSURIZE, CUT WELD, BRAZE SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Plastic: Empty container may retain product residues. Do not reuse this container.
Other: No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROTREATED HEAVY NAPHTHA</td>
<td>64742-48-9</td>
<td>OSHA - PEL: TWA 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH - TLV: TWA 100 ppm</td>
</tr>
<tr>
<td>HEPTANE</td>
<td>142-82-5</td>
<td>OSHA - PEL: TWA 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH - TLV: TWA 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH - TLV: STEL 500 ppm</td>
</tr>
<tr>
<td>BUTANE</td>
<td>106-97-8</td>
<td>ACGIH - TLV: TWA 800 ppm</td>
</tr>
<tr>
<td>PROPAE</td>
<td>74-98-6</td>
<td>OSHA - PEL: TWA 1000 ppm</td>
</tr>
</tbody>
</table>

Personal Protective Equipment

Eye/Face Protection: Eye protection is not required under conditions of normal use. If material is handled such that it could be sprayed into eyes, wear plastic face shield or splash-proof safety goggles.

Skin Protection: No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious synthetic rubber clothing (boots, gloves, aprons, etc.) over parts of the body subject to exposure. Launder soiled clothes.

Respiratory Protection: Respiratory protection is not required under conditions of normal use. If excessive levels of mists or vapors are generated while using this product, use an organic vapor respirator. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

Personal Hygiene: Consumption of food and beverage should be avoided in work areas where this product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

Engineering Controls / Work Practices

Ventilation: If product is used in enclosed or confined spaces, adequate ventilation must be provided to prevent buildup of vapors or mists. Adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits. See also Fire and Explosion Information in Section 5.

Other: The OSHA PEL for petroleum distillates is 2000 mg/m3. NIOSH recommended limits for petroleum distillates are 350 mg/m3 (10-hr TWA) and 1800 mg/m3 (15-min ceiling).
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless, clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Sweet - mild</td>
</tr>
<tr>
<td>Physical state</td>
<td>Aerosol</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.68</td>
</tr>
<tr>
<td>Pour Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Octanol / Water Coefficient</td>
<td>Log K_{ow} = No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Percent Volatile by Volume</td>
<td>&gt; 90%</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No data available</td>
</tr>
<tr>
<td>Volatile Organic Content</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity @ 100 F</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity @ 40 C</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY INFORMATION

**Chemical Stability:** Stable

**Conditions to Avoid:** None
Keep away from heat, sparks, open flames and other ignition sources.
Temperatures above 120 F.

**Incompatible Materials to Avoid:** May react with strong oxidizing agents.

**Other:** No information available

11. TOXICOLOGICAL INFORMATION

**Primary Eye Irritation:** No information available

**Primary Skin Irritation:** No information available

**Acute Dermal Toxicity:** No information available

**Subacute Dermal Toxicity:** No information available

**Dermal Sensitization:** No information available

**Inhalation Toxicity:** Some potential components of these blends are considered uniquely toxic at high concentrations, such as benzene (bone marrow disorders including leukemia and anemia), and n-hexane (peripheral neuropathy). However, at the low concentrations at which they may be presented in the blend, and at the low exposure levels at which they may be encountered as vapors, these components do not present a significant health risk.

**Inhalation Sensitization:** No information available

**Oral Toxicity:** No information available

**Mutagenicity:** No information available

**Carcinogenicity:** Light hydrocarbons such as stoddard solvent, VM & P naphtha and C10-C11 isoparaffins have produced kidney damage in male rats, but not in female rats or mice. The Environmental Protection Agency (EPA) has concluded that rat kidney damage and tumors induced by light petroleum hydrocarbons are not relevant to humans. Various naphthas tested were not carcinogenic in mouse skin painting studies conducted by the American Petroleum Institute.
(API). The International Agency for Research on Cancer (IARC) has concluded that petroleum solvents are Group 3 substances, "not classifiable as to their carcinogenicity to humans.

**Reproductive and Developmental Toxicity:** No information available

**Teratogenicity:** No information available

**Immunotoxicity:** No information available

**Neurotoxicity:** No information available

**Other:** No information available

### 12. ECOLOGICAL INFORMATION

**Aquatic Toxicity:** May be toxic to aquatic organisms.

**Terrestrial Toxicity:** No information available

**Chemical Fate and Transport:** No information available

**Other:** No information available

### 13. DISPOSAL INFORMATION

**Regulatory Information:** All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a RCRA waste. Caution! If regulated solvents are used to clean up spilled material, the resulting waste mixture may be regulated. Department of Transportation (DOT) regulations may apply for transporting this material when spilled.

**Waste Disposal Methods:** Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

**Other:** No information available

### 14. TRANSPORTATION INFORMATION

**U.S. Department of Transportation (DOT)**

- **Highway / Rail (Bulk):** NOT APPLICABLE
- **Highway / Rail (Non-Bulk):** CONSUMER COMMODITY, ORM-D

For US shipments, US DOT law requires the shipper to determine the proper shipping description of the material that is being shipped. The shipping information and description contained in this section may not be suitable for all shipments of this material, but may help the shipper determine the proper shipping description for a particular shipment.
International Information

Vessel:  IMDG Regulated:  X  IMDG Not Regulated:  --
Air:  ICAO Regulated:  X  ICAO Not Regulated:  --

Other: No information available

15. Regulatory Information

Regulatory Lists Searched: The components listed in Section 2 of this MSDS were compared to substances that appear on the following regulatory lists. Each list is numerically identified. See Regulatory Search Results below.


Environmental:  30 - CAA 1990 Hazardous air pollutants, 31 - CAA Ozone depletors, 33 - CAA HON rule, 34 - CAA Toxic substance for accidental release prevention, 35 - CAA Volatile organic compounds (VOC's) in SOCMI, 41 - CERCLA / SARA Section 302 extremely hazardous substances, 42 - CERCLA / SARA Section 313 emissions reporting, 43 - CWA Hazardous substances, 44 - CWA Priority pollutants, 45 - CWA Toxic pollutants, 46 - EPA Proposed test rule for hazardous air pollutants, 47 - RCRA Basis for listing - Appendix VII, 48 - RCRA waste, 49 - SDWA - (S)MCLs

International:  50 - Canada - WHMIS Classification of substance, 54 - Mexico - Drinking water - ecological criteria, 55 - Mexico - Wastewater discharges, 56 - US -TSCA Section (12)(b) - export notification


Inventories:  80 - Canada - Domestic substances, 81 - European - EINECS, 82 - Japan - ENCS, 83 - Korea - Existing and evaluated chemical substances, 84 - US -TSCA, 85 - China Inventory

Regulatory Search Results:
BUTANE: 15, 17, 22, 23, 50, 63, 65, 66, 67, 68, 69, 80, 81, 82, 83, 84, 85
HEPTANE 15, 16, 17, 23, 50, 61, 63, 65, 66, 67, 69, 80, 81, 82, 83, 84, 85
HYDROTREATED HEAVY NAPHTHA: 80, 81, 83, 84, 85
POLYDIMETHYLSILOXANE: 80, 82, 83, 84, 85
PROPANE: 15, 16, 17, 22, 23, 63, 65, 66, 67, 68, 69, 80, 81, 82, 83, 84, 85

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory.

SARA Section 313: Consumer products are not regulated under SARA, Title III, Section 313.

IARC: No information available

SARA 311 / 312 Categories
Acute:  X  Chronic:  --  Fire:  X  Pressure:  X  Reactive:  --
Not Regulated:  --

Canadian WHMIS Classification
Class B - Flammable and Combustible Material, Division 5, Flammable Aerosols
Class D - Poisonous and infectious material, Division 2B, Toxic Material
European Union Classification

Hazard Symbols:
- Dangerous for the environment / N / dead tree and fish in square
- Harmful / Xn / X in square.
- Highly flammable / F / flame in square.

Risk Phrases:
- R11: Highly flammable.
- R36: Irritating to eyes.
- R65: Harmful: may cause lung damage if swallowed.
- R66: Repeated exposure may cause skin dryness or cracking.
- R67: Vapours may cause drowsiness and dizziness.

Safety Phrases:
- S2: Keep out of the reach of Children.
- S23: Do not breathe gas/fumes/vapour/spray.
- S24/25: Avoid contact with skin and eyes.
- S61: Avoid release to the environment.  Refer to special instructions/Safety data sheet.
- S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Other: No information available

16. OTHER INFORMATION

Health and Environmental Label Language

Front Label:
DANGER: EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE. HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL.
Read carefully other cautions on back.

Back Label:
DANGER: Contains heptane, propane, butane and petroleum distillate. Inhaling or ingesting can cause headache and nausea. Prolonged and repeated skin contact may cause drying of skin.

PRECAUTIONARY MEASURES: Do not puncture, incinerate or store above 120 F. Keep away from heat, flames, sparks and other ignition sources. Exposure to heat may cause can to burst. Avoid breathing of mists and vapors. Use only in well ventilated areas. Avoid prolonged skin contact. Wash thoroughly after handling. Store and transport in a closed upright position.

FIRST AID: If swallowed, do not induce vomiting. Call physician immediately. For eye contact, wash thoroughly with water. If inhaled, breathe fresh air. If not breathing, give artificial respiration. Call physician immediately.

Use only as directed. Intentional misuse by deliberately concentrating and/or inhaling can be harmful or fatal.

WARNING: This product contains chemical(s) known to the state of California to cause cancer, birth defects or other reproductive harm.
KEEP OUT OF REACH OF CHILDREN.

MSDS Revisions
Previous Version Date: 6/21/2002

Previous Version Information
Section 14 - Transportation Information Revised.
Revised sections . . .
1 - Product and Company Identification
2 - Component Information
3 - Hazards Identification
5 - Fire and Explosion Information
15 - Regulatory Information

Other
No information available

Prepared By:
SOPUS Products
P.O. Box 4427
Houston, TX  77210-4453  USA

Disclaimer of Warranty: The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, SOPUS Products must rely upon the hazard evaluation of such components submitted by that product’s manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information, the results to be obtained from the use thereof, or that any such use do not infringe any patent. Since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.