Material Safety Data Sheet

PSF-600,000cSt Silicone Damping Fluid

Data Prepared: October 15th, 2014

SECTION I: PRODUCT AND COMPANY IDENTIFICATION

Product Name: **PSF-600,000cSt Silicone Damping Fluid**
Product Code: PSF-600,000cSt

Provided by: **CLEARCO PRODUCTS CO. INC.,**
3430 G. Progress Drive
Bensalem, PA 19020 U.S.A.

Telephone No: 001 215 639-2640
Fax No: 001 215 639-2919
E-mail: info@clearcoproducts.com
Website: www.clearcoproducts.com

Emergency Telephone: CHEM TEL: 1-800-255-3924 (DOMESTIC)
+01-813-248-0585 (INTERNATIONAL)

General Description: Silicone Fluid, Polydimethylsiloxane
Physical Form: Liquid
Color: Colorless
Odor: Characteristic Odor

NFPA Profile: Health 0 Flammability 1 Instability/Reactivity 0
Note: NFPA= National Fire Protection Association

SECTION II: HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS
Acute Effects
Eye: Direct contact may cause temporary redness and discomfort.
Skin: No significant irritation expected from a single short-term exposure.
Inhalation: No significant effects expected from a single short-term exposure.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects
Skin: No known applicable information.
Inhalation: No known applicable information.
Oral: No known applicable information.

Signs and Symptoms of Overexposure
No known applicable information.

Medical Conditions Aggravated by Exposure: No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS No.	% Weight
Polydimethylsiloxane	63148-62-9	100

SECTION IV: FIRST AID MEASURES

Eye Contact: Immediately flush with water.
Skin Contact: No first aid should be needed.
Inhalation: No first aid should be needed.
Oral: No first aid should be needed.
Notes to Physician: Treat symptomatically.

SECTION V: FIRE FIGHTING MEASURES

Flash Point: >248°F/ >120 °C (Closed Cup)
>482°F/ >250 °C (Cleveland Open Cup)

Autoignition Temperature: Not determined
Flammability Limits in Air: Not determined

Extinguishing Media: On large fires use dry chemical, foam or water spray. On Small fires use carbon dioxide (CO2), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards:None

SECTION VI: ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Determine whether to evacuate or isolate the area according the your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Clear area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (1-800-255-3924), if additional information is required.

SECTION VII: HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye contact.
Use reasonable care and store away from oxidizing materials.

SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits
There are no components with workplace exposure limits.

Engineering Controls

Local Ventilation: None should be needed.
General Ventilation: Recommended

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection- safety glasses as a minimum
Skin: Washing at mealtime and end of shift is adequate
Suitable Gloves No special protection needed.
Inhalation: No respiratory protection should be needed.
Suitable Respirator: None should be needed

Personal Protective Equipment for Spills

Eyes: Use proper protection-safety glasses as a minimum
Skin: Washing at mealtime and end of shift is adequate
Inhalation/Suitable Respirator: No respiratory protection should be needed

Precautionary Measures: Avoid eye contact. Use reasonable care

Comments: When heated to temperatures above 150 degrees C in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document

regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact Clearco Products customer service.

SECTION IX: PHYSICAL & CHEMICAL PROPERTIES

Physical Form	Liquid
Color	Colorless
Odor	Characteristic Odor
Specific Gravity @ 25 deg C	0.976
Viscosity	600,000cSt
Freezing	<-25 def C; -13 deg F
Boiling Point	>65 deg C
Evaporation Rate (Butyl Acetate=1)	<1
Density	0.97 g/cm3
Solubility in Water (20C)	Insoluble
pH	Not determined
Volatile Content	Not determined
Solubility in Organic Solvent (State Solvent)	Soluble in Tolene
VOC Excl. H2O & Exempts (G/L)	14 g/l
Flash Point:	>248°F/ >120 °C (Closed Cup) >482°F/ >250 °C (Cleveland Open Cup)

SECTION X: STABILITY AND REACTIVITY

Chemical Stability:	Stable
Hazardous Polymerization:	Hazardous polymerization will not occur.
Conditions to Avoid:	None
Material to Avoid:	Oxidizing material can cause a reaction.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon Dioxide. Formaldehyde.

SECTION XI: TOXICOLOGICAL INFORMATION

Acute Toxicology Data for Product

	Species	Test Results
Oral LD50:	Rat	>50 ML/KG

Special Hazard Information on Components
No known applicable information.

SECTION XII: ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Air: This product is a high molecular weight liquid polymer which has a very low vapor pressure (<1 mm Hg). As a result it is unlikely to become an atmospheric containment unless generated as an aerosol.

Water: This product has very low solubility (<100 ppb). As it has a specific gravity of < 1, if discharged to water, it will initially form a surface film. AS the product is non volatile and has a high binding affinity for particulate matter, it will absorb to particulates and sediment out.

Soil: If discharged to surface water, this product will bind to sediment. If discharged in effluent to a waste water treatment plant, the product is removed from the aqueous phase by binding to sewage sludge. If the sewage sludge is subsequently spread on soil the silicone product is expected to degrade.

Degradation: This product, polydimethylsiloxane, degrades in soil abiotically to form smaller molecules. These in turn are either biodegraded in soil or volatilized into the air where they are broken down in the presence of sunlight. Under appropriate conditions, the ultimate degradation products are inorganic silica, carbon dioxide and water vapor. Due to the very low solubility of this product, standard OECD protocols for ready and inherent biodegradability are not suitable for measuring the biodegradability of this product. The product is removed >80% during the sewage treatment process.

Environmental Effects
Toxicity to Water Organisms: Based on analogy to similar materials this product is expected to exhibit low toxicity to aquatic organisms.

Toxicity to Soil Organisms: Experiments show that when sewage sludge containing polydimethylsiloxane is added to soil, it has no effect on soil micro-organisms, earthworms or subsequent crops grown in the soil.

Bioaccumulation: This product is a liquid and is a high molecular weight polymer. Due to its physical size it is unable to pass through, or be absorbed by biological membranes. This has been confirmed by testing or analogy with similar products.

Fate and Effects in Waste Water Treatment Plants
This product or similar products has been shown to be non-toxic to sewage sludge bacteria.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC 50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <=2000	>2000

This table is adapted from “Environmental Toxicology and Risk Assessment”, ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

SECTION XIII: DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

SECTION XIV: TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)
Not subject to DOT.

Ocean Shipment (IMDG)
Not subject to IMDG code.

Air Shipment (IATA)
Not subject to IATA regulations

Call Clearco Products Co Inc, (215) 639-2640, if additional is required.

SECTION XV: REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):
None

Section 304 CERCLA Hazardous Substances (40 CFR 302):
None

Section 311/312 Hazard Class (40 CFR 370):

Acute:	No
Chronic:	No
Fire:	No
Pressure:	No
Reactive:	No

Section 313 Toxic Chemicals (40 CFR 372):
None present or none present in regulated quantities

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

Supplemental State Compliance Information

California
Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts
No ingredient regulated by MA Right-to-Know Law present.

New Jersey

CAS Number	Wt%	Component Name
63148-62-9	>60.0	Polydimethylsiloxane

Pennsylvania

63148-62-9	>60.0	Polydimethylsiloxane

SECTION XVI: OTHER INFORMATION

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is herby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.