

SAFETY DATA SHEET

PSF-2cSt Silicone Dielectric Fluid



Data Prepared: January 7, 2015

SECTION 1: Identification

Product name : PSF-2cSt Silicone Dielectric Fluid
Product code : PSF-2cSt

Manufacturer or supplier details

Company name of supplier : Clearco Products Co Inc.

Address : 15 York Road
Willow Grove, PA 19090 U.S.A.

Telephone : 215-366-7860

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

Recommended use of the chemical and restrictions on use

Recommended use : Cleaning/washing agents and additives
Solvent
Process regulators, other than polymerization or vulcanization processes
Cosmetics
Intermediate

SECTION 2: Hazards identification

GHS Classification

Flammable liquids : Category 4

GHS Label element

Signal Word : Warning

Hazard Statements : H227 Combustible liquid

Precautionary Statements : **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking

P280 Wear protective gloves/eye protection/face protection.

Storage:

P403+P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Vapors may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

Substance/ Mixture : Mixture
Chemical nature : Silicone

Hazardous components : No hazardous ingredients

SECTION 4: First aid measures

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap as a precaution.
Get medical attention if symptoms occur.

In case of eye contact : Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed
None known.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Notes to physician : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Dry foam
Carbon dioxide (CO₂)

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapors may form explosive mixture with air.
Fire burns more vigorously than would be expected.
Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides
Silicon oxides
Formaldehyde

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Cool containers/tanks with water spray. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

SECTION 6: Accidental release measures

Personal precautions, protective protective equipment and emergency procedures	: Remove all sources of ignition. Follow safe handling advice and personal protective equipment recommendations
Environmental precautions	: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods for cleaning up	: Non-sparking tools should be used. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Suppress (knock down) gases/vapors/mists with a water spray jet. 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. Local or national 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 regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7: Handling and storage

Technical measures	: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	: Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation.
Advice on safe handling	: Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Keep away from heat and sources of ignition Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	: Keep in properly labelled containers. Keep tightly closed Keep in a cool, well ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition
Materials to avoid	: Do not store with the following product types:

Strong oxidizing agents
Explosives
Gases

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures

Processing may form hazardous compounds (see section 10).
Ensure adequate ventilation, especially in confined areas.
Minimize workplace exposure concentrations.
Use only in an area equipped with explosion proof exhaust ventilation.

Personal protective equipment

Respiratory protection	: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Hand protection material: Remarks:	: Flame retardant gloves : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Wash hands before breaks and at the end of workday.
Eye protection	: Wear the following personal protective equipment: Safety glasses
Skin and body protection	: Select appropriate protective clothing based on chemical resistance data and as assessment of the local exposure potential. Wear the following personal protective equipment: Flame retardant antistatic protective clothing. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Hygiene measures	: Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding the use of silicone/organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry

(www.SEHSC.com) or contact the Clearco Products customer service group.

SECTION 9: Physical and chemical properties

Appearance	: liquid
Colour	: colorless
Odour	: none
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: 230 °C
Flash point	: 87 °C Method: Tag closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: 0.872
Solubility(ies) Water solubility	: No data available
Partition coefficient: noctanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity Viscosity, kinematic	: 2 cSt
Explosive properties	: Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

SECTION 10: Stability and reactivity

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Combustible liquid.
Vapors may form explosive mixture with air.
Can react with strong oxidizing agents.
When heated to temperatures above 150 °C (300 °F) in the presence of air, trace quantities of formaldehyde may be re-leased.
Adequate ventilation is required.
See OSHA formaldehyde standard, 29 CFR 1910.1048
Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition products
Thermal decomposition : Formaldehyde

SECTION 11: Toxicological information**Information on likely routes of exposure**

Inhalation

Skin contact

Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity.
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit

Result : No skin irritation
Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species : Rabbit
Result : No eye irritation
Remarks : Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative
Remarks: Based on test data

Carcinogenicity

Not classified based on available information.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Product:

Exposure routes : Ingestion
Assessment : No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Exposure routes : Skin contact
Assessment : No significant health effects observed in animals at concentrations of 200 mg/kg bw or less.

Repeated dose toxicity

Product:

Species: Rat
Application Route: Ingestion
Remarks: Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: This material contains dodecamethylcyclohexasiloxane (D6). D6 was administered to rats by whole body inhalation to 0, 1, 10 and 30 ppm for a period of 13-14 weeks. An increased incidence and severity of inflammation and hyperplasia was observed in the nasal region in the 10 and 30 ppm dose groups. These observations are consistent with a mucosal irritant, however there was little or incomplete recovery after the 28-day recovery period. The relevance of these findings to humans is unknown.

SECTION 12: Ecological information

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13: Disposal considerations

Disposal methods

Resource Conservation and Recovery Act (RCRA) : This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form.

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not burn, or use cutting torch on the empty drum.

SECTION 14: Transport information

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied

Domestic regulation

49 CFR

UN/ID/NA number : NA1993
Proper shipping name : COMBUSTIBLE LIQUID, N.O.S.
(Dodecamethylpentasiloxane, Dodecamethyl cyclohexasiloxane)
Class : CBL
Packing Group : III
Labels : None
ERG Code : 128
Marine pollutant : no
Remarks : Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).

SECTION 15: Regulatory information

EPCRA-Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right to Know

Dodecamethylpentasiloxane	141-63-9	90-100%
Dimethyl Siloxane, Trimethylsiloxy-terminated	63148-62-9	1-5%

New Jersey Right To Know

Dodecamethylpentasiloxane	141-63-9	90-100%
Dimethyl Siloxane, Trimethylsiloxy-Terminated	63148-62-9	1-5%
Dodecamethyl cyclohexasiloxane	540-97-6	1-5%

California Prop 65 This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

KECI	: All ingredients listed, exempt or notified.
REACH	: All ingredients (pre)-registered or exempt
TSCA	: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS	: All ingredients listed or exempt.
IECSC	: All ingredients listed or exempt.
ENCS/ISHL	: All components are listed on ENCS/ISHL or exempted from inventory listing.
PICCS	: All ingredients listed or exempt.
DSL	: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances list (DSL).
NZIoC	: All ingredients listed or exempt.

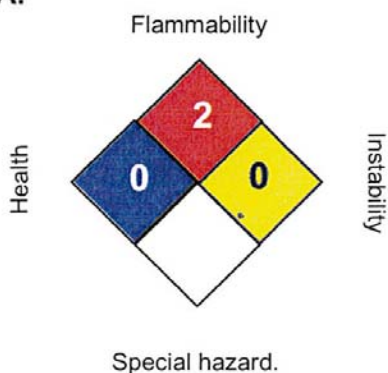
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA(USA).

SECTION 16: Other information

Further Information

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Sources of key data used to compile the Material Safety Data Sheet

: Internal technical data, data from raw materials SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.edu/>

Revision Date

:01/07/2015

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