



326 Exchange Drive
Arlington, Texas 76011
817-469-7777

Safety Data Sheet SPI-5025

1. Identification

Product name SPI-5025

Manufacturer/Importer/Supplier/Distributor information
Company name Silicones Plus, Inc.
Address 326 Exchange Drive
Arlington, Texas 76011
Phone 817-469-7777
Website <http://siliconesplus.com/>
E-mail andrew@siliconesplus.com or carla@siliconesplus.com
Emergency phone number CHEMTREC within US & Canada 1-800-424-9300
CHEMTREC outside US & Canada +1 703-527-3887

2. Hazard(s) identification

Classification of the substance or mixture: FLAMMABLE LIQUIDS – Category 4
TOXIC TO REPRODUCTION- Category 2

GHS Label Elements



Hazard Pictograms:

Signal Word:

Hazard Statements:

Warning

H227 Combustible Liquid.

H361f Suspected of damaging fertility.

Precautionary Statement

General:

Prevention:

Not Applicable

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective gloves. Wear eye protection. Keep away from flames and hot surfaces. No Smoking.

Response:

Storage:

IF exposed or concerned seek medical attention.

Store locked up.

P403 Store in a well-ventilated place.

P235 Keep cool.

Disposal:

P501 Dispose of contents and container in accordance with all local, regional, national, and international regulations.

Other hazards that don't result in classification: None known.

3. Composition/information on ingredients

Substance/mixture: Mixture



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Chemical Name: Silicone Gel in D5

Hazardous Components

Chemical name	CAS number	%
Decamethylcyclopentasiloxane	541-02-6	70-100
Octamethylcyclotetrasiloxane	556-67-2	0.1-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

4. First-aid measures

- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Ingestion:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Notes to Physician:

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific Treatments:

No specific treatment

Protection of first aid personnel:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

5. Fire-fighting measures

Suitable extinguishing media

Foam. Dry chemical powder. Carbon dioxide (CO₂). Powder.



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Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Special protective equipment and precautions for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Fire-fighting equipment/instructions

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Emergency Responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental Precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small Spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13 of SDS). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the



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spilled product. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

7. Handling and storage

Precautions for safe handling

As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Use of a designated area is recommended for handling of potent materials.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

8. Exposure controls/personal protection

Occupational Exposure Limits:

Ingredient Name	Exposure Limits
Octamethylcyclotetrasiloxane	Recommended Exposure Limit (REL): 5 ppm

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental Exposure Controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection Chemically compatible gloves. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic non-latex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.

Other Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations.



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Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

9. Physical and chemical properties

Physical State:	Paste
Color:	Colorless
Odor	Odorless
Odor threshold	Not available.
pH	Not applicable.
Melting point point	-44 °C (47.20- °F) Estimated.
Initial boiling point	210 °C (410.00 °F)
Flash point	76.66 °C (169.99 °F) (Closed cup)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available.
Flammability limit – upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Less than 1 [Air=1]
Relative density	Not available.
Density:	0.96 g/cm ³
Solubility in water	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Viscosity	Dynamic: Not available Kinematic: Not available

10. Stability and reactivity

Reactivity	Stable under normal conditions.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions:	No dangerous reaction known under conditions of normal use.
Conditions to avoid:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials:	Oxidizing materials
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on Toxicological Effects
Acute Toxicity



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Acute Toxicity

Product/Ingredient Name	Results	Species	Dose	Exposure
Octamethylcyclotetrasiloxane				
	LD50 oral	Rat	4,800 mg/kg OECD-Guideline 401 (Acute Oral Toxicity)	-
	LC Inhalation	Rat	> 12.1 mg/l	4 h
	LC Inhalation	Rat	36 mg/l OECD Test Guideline 403	4 h
	LD50 Dermal	Rat	> 2,400 mg/kg OECD Test Guideline 402	-

Conclusion/Summary: Not determined

Irritation/Corrosion

Product/Ingredient Name	Result	Species	Observation
SPI-5025	Skin	Rabbit	-
	Remarks: Non-irritating to the skin		
	Eyes	Rabbit	-
	Remarks: Non-irritating to the eyes		
Octamethylcyclotetrasiloxane	Skin OECD-Guidelines 404 (Acute Dermal Irritation/Corrosion)	Rat	-
	Remarks: Non-irritating to the skin		
	Eyes OECD-Guideline 405 (Acute Eye Irritation/Corrosion)	Rabbit	-
	Remarks: Non-irritating to the eyes		

Conclusion/Summary

Skin: Not determined
Eyes: Not determined
Respiratory: Not determined

Sensitization

Product/Ingredient Name	Route of Exposure	Species	Result
Octamethylcyclotetrasiloxane	-	Guinea Pig	Not sensitizing OECD-Guideline 406 (Skin Sensitisation)
SPI-5025	Sensitisation, skin	Mouse	Negative OECD Guideline 429 (LLNA)

Conclusion/Summary

Skin: Not determined
Respiratory: Not determined

Mutagenicity

Product/Ingredient Name	Test	Experiment	Results
Octamethylcyclotetrasiloxane	OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reserve Mutation Assay)	In Vitro	Negative
	Mouse Lymphoma Assay (OECD Guideline 476)	In Vitro	Negative



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	OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)	In Vivo	Negative
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Conclusion/Summary: Not Determined

Carcinogenicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Octamethylcyclotetrasiloxane	Inhalation- OECD 453	Rat- Female	150 mg/kg	24 months
Remarks:	NOAEC			
	Inhalation- OECD 453	Rat- Male	>700 mg/kg	24 months
Remarks:	NOAEC			

Conclusion/Summary: Not Determined

Reproductive Toxicity

Product/Ingredient Name	Material Toxicity	Fertility	Development Toxin	Species	Dose	Exposure
Octamethylcyclotetrasiloxane	-	-	-	Rat	Inhalation: 300 mg/kg OECD 416	-
Remarks	NOAEL parents					
	-	-	-	Rat	Inhalation: 300 mg/kg OECD 416	-
Remarks	NOAEL F1					

Conclusion/Summary: Not Determined

Teratogenicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Octamethylcyclotetrasiloxane	Inhalation OECD Test Guideline 414	Rabbit	500 mg/kg	18 days
Remarks	NOAEL			
	Inhalation OECD Test Guideline 414	Rabbit	300 mg/kg	18 days
Remarks	NOAEL Maternity			

Conclusion/Summary: Not Determined

Specific target organ toxicity (single exposure): Not available
 Specific target organ toxicity (repeated exposure): Not available
 Aspiration Hazard: Not available
 Information on the likely routes of exposure: Not available

Potential Acute Health Effects

Eye contact: No known significant effects or critical hazards.
 Inhalation: No known significant effects or critical hazards.
 Skin contact: No known significant effects or critical hazards.
 Ingestion: No known significant effects or critical hazards.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics

Eye contact: No specific data.



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Inhalation: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
 Skin contact: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
 Ingestion: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Potential Chronic Health Effects

Product/Ingredient Name	Result	Species	Dose	Exposure
Octamethylcyclotetrasiloxane	NOAEC Inhalation	Rat	150 mg/kg OECD 453	24 months
Remarks:	NOAEC			
	NOAEL Dermal	Rabbit	>1 mg/kg OECD 410	3 weeks
Remarks:	NOAEL			

Conclusion/Summary: Not determined

General: No known significant effects or critical hazards.
 Carcinogenicity: No known significant effects or critical hazards.
 Mutagenicity: This material was not mutagenic in an Ames bacterial assay.
 Teratogenicity: No known significant effects or critical hazards.
 Developmental effects: No known significant effects or critical hazards.
 Fertility effects: Suspected of damaging fertility.

12. Ecological information

Ecotoxicity Not available.

Persistence and Degradability

Product/Ingredient Name	Test	Result	Dose	Inoculum
Octamethylcyclotetrasiloxane	310 Ready	3.7 % - 29 d		Activated Sludge
Remarks:	Not readily biodegradable.			

Conclusion/Summary: Not available

Bioaccumulative Potential

Product/Ingredient Name	Species	Exposure	LogPow	BCF	Potential
Octamethylcyclotetrasiloxane	Fathead Minnow	28 d		12.40	low

Mobility in Soil: Not available.
 Other Adverse Effects: Not available.

13. Disposal considerations

Disposal Methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with



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jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. See Section 8 for information on appropriate personal protective equipment.

14. Transport information

DOT

DOT Shipping Name:	Combustible liquid, n.o.s. (declamethylcyclopentasiloxane)
DOT HAZARD CLASS:	CBL
DOT LABEL (S):	NON
UN/NA NUMBER:	NA 1993
PACKING GROUP:	III

Special precautions for user: This product is Combustible as defined by the US Department of Transportation (DOT). It is regulated for transport in the US in container > 119 gallons. The product is not regulated for transport by the IATA, ADR/RID, ADNR or the IMDG regulations.

15. Regulatory information

US federal regulations

United States - TSCA 12(b) - Chemical export notification:	None required.
United States - TSCA 5(a)2 - Final significant new use rules:	Not listed
United States - TSCA 5(a)2 - Proposed significant new use rules:	Not listed
United States - TSCA 5(e) - Substances consent order:	Not listed
SARA 311/312 Classification:	Fire hazard, Delayed (Chronic) Hazard
California Prop. 65:	None required.

Canada

WHMIS (Canada): Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (Very toxic).

International Lists:

Australia inventory (AICS): At least one component is not listed.
Japan inventory: At least one component is not listed.
China inventory (IECSC): All components are listed or exempted.
Korea inventory: All components are listed or exempted.
Canada inventory: All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
United States inventory (TSCA 8b): At least one component is not listed. This product is intended only for personal care applications. It is not intended for industrial use; therefore, it is not subject to TSCA.
Taiwan inventory (CSNN): All components are listed or exempted.



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16. Other information, including date of preparation or last revision

Hazardous Material Information System III (USA):

Health:	1
Flammability:	2
Physical Hazards:	0
Issue date	05-29-2008
Revision date	8-18-2015
Version #	03
Further information	Not available.
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