



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

Safety Data Sheet SPI-6001G

1. Identification

Product name SPI-6001G
Other means of identification
Chemical name Polydimethylsiloxane Gum

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

Hazard Classification

Health Hazards

Toxic to reproduction Category 2

Label Elements



Hazard Elements

Signal Word:

Warning

Hazard Statement:

H361f Suspected of damaging fertility or the unborn child.

Precautionary Statement

Prevention:

Use personal protective equipment as required.

Response:

If exposed or concerned: Get medical advice/attention.

Storage:

Store in a well-ventilated place.

Disposal:

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

3. Composition/information on ingredients

General information:

Substance/mixture: Mixture

Chemical name: Not available

Composition information of impurities and stabilizers

Chemical Identity	Common Name and Synonyms	CAS Number	Content in Percent (%)
Octamethylcyclotetrasiloxane	D4	556-67-2	1-5%

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.



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4. First-aid measures

General information:	For further information refer to section 8 "Exposure-controls/personal protection".
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.
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:	In case of contact, immediately absorb excess with clean absorbent cloth or cotton. Then, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur.
Most important symptoms/effects, acute and delayed	
Symptoms:	None known.
Hazards:	No specific recommendations.
Indication of immediate medical attention and special treatment needed	
Treatment:	No specific recommendations.

5. Fire-fighting measures

General Fire Hazards:	No specific recommendations.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	
	In a fire or if heated, a pressure increase will occur and the container may burst.
Special protective equipment and precautions for firefighters	
Special firefighting procedures:	



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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. 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.

Special protective equipment for fire-fighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors. Ensure adequate ventilation. Wear appropriate personal protective equipment.

Methods and materials 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. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

7. Handling and storage

Protective measures

Put on appropriate personal protective equipment (see section 8 of SDS). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities



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Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Exposure guidelines No exposure standards allocated.

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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 nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.

Other

For handling of laboratory scale quantities, a cloth lab coat is recommended. Where significant quantities are handled, work clothing may be necessary to prevent take-home contamination.

Respiratory protection Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

General hygiene Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance Transparent, Colorless

Physical state Paste

Odor Odorless

Odor threshold Not applicable

pH Not applicable

Melting point/freezing point No data available

Flash point > 302 °F (150 °C)

Evaporation rate 1

Flammability (solid, gas) Not available

Upper/lower flammability or explosive limits



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Flammability limit – lower (%)	Not available.
Flammability limit – upper (%)	Not available.
Vapor pressure	1.33 hPa (68°F (20°C))
Vapor density	Greater than 1.0 [Air = 1]
Relative density	1.0 (68 °F (20 °C)) Approximate
Density	1.0 g/cm ³
Solubility in water	Insoluble
Solubility	Toluene
Partition coefficient (n-octanol/water)	No data available
Auto-ignition temperature	Not applicable
Decomposition Temperature	Not available
Viscosity	Dynamic: Not available Kinematic: Not available
SDAT	Not available

10. Stability and reactivity

Reactivity	Stable under normal conditions
Chemical stability	Stable
Possibility of hazardous reactions	Will not occur
Conditions to avoid	No specific data
Incompatible materials	No specific data
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

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
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		



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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)

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
	OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)	In Vivo	Negative

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			



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	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.
 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



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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.

Other information

Octamethylcyclotetrasiloxane (D4) meets the current REACH Annex XIII criteria for PBT and vPvB. However, D4 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

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 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

Special precautions for user

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

15. Regulatory information

United States

U.S. 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



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SARA 311/312 Classification	Delayed (chronic) health hazard
California Prop. 65	None required.
Canada	
WHMIS (Canada)	Not controlled under WHMIS (Canada).

International lists

Japan inventory: All components are listed or exempted.
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): All components are listed or exempted.
Taiwan inventory (CSNN): At least one component is not listed.

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

HMIS Hazard ID

Health:0 Flammability:1 Physical Hazards:0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect

NFPA Hazard ID

Health:0 Flammability:1 Reactivity:0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

Full text of abbreviated H statements: Not applicable.

Issue date 05-29-2008

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Version # 06

Further information Not available.

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