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: P501Dispose 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

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Common Name and Synonyms</th>
<th>CAS Number</th>
<th>Content in Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>D4</td>
<td>556-67-2</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
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, CO2, 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:
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
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Transparent, Colorless</td>
</tr>
<tr>
<td>Physical state</td>
<td>Paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 302 °F (150 °C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>1</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Results</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>LD50 oral</td>
<td>Rat</td>
<td>4,800 mg/kg OECD-Guideline 401 (Acute Oral Toxicity)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LC Inhalation</td>
<td>Rat</td>
<td>&gt; 12.1 mg/l</td>
<td>4 h</td>
</tr>
<tr>
<td></td>
<td>LC Inhalation</td>
<td>Rat</td>
<td>36 mg/l OECD Test Guideline 403</td>
<td>4 h</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>&gt; 2,400 mg/kg OECD Test Guideline 402</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Not determined

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Result</th>
<th>Species</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>Skin OECD-Guidelines 404 (Acute Dermal Irritation/Corrosion)</td>
<td>Rat</td>
<td>-</td>
</tr>
<tr>
<td>Remarks: Non-irritating to the skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyes OECD-Guidelines 405 (Acute Eye Irritation/Corrosion)</td>
<td>Rabbit</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Remarks: Non-irritating to the eyes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Conclusion/Summary**

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Guinea Pig</td>
<td>Not sensitizing OECD-Guideline 406</td>
</tr>
</tbody>
</table>

**Sensitization**

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Route of Exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>-</td>
<td>Guinea Pig</td>
<td>Not sensitizing OECD-Guideline 406 (Skin Sensitisation)</td>
</tr>
</tbody>
</table>

**Mutagenicity**

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Test</th>
<th>Experiment</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reserve Mutation Assay)</td>
<td>In Vitro</td>
<td>Negative</td>
</tr>
<tr>
<td>Mouse Lymphoma Assay (OECD Guideline 476)</td>
<td>In Vitro</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)</td>
<td>In Vivo</td>
<td>Negative</td>
<td></td>
</tr>
</tbody>
</table>

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>Inhalation-OECD 453</td>
<td>Rat-Female</td>
<td>150 mg/kg</td>
<td>24 months</td>
</tr>
</tbody>
</table>

Remarks: NOAEC

<table>
<thead>
<tr>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat-Male</td>
<td>&gt;700 mg/kg</td>
<td>24 months</td>
</tr>
</tbody>
</table>

Remarks: NOAEC

**Reproductive Toxicity**

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Material Toxicity</th>
<th>Fertility</th>
<th>Development Toxin</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Rat</td>
<td>Inhalation: 300 mg/kg OECD 416</td>
<td>-</td>
</tr>
</tbody>
</table>

Remarks: NOAEL parents

<table>
<thead>
<tr>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td>Inhalation: 300 mg/kg OECD 416</td>
<td>-</td>
</tr>
</tbody>
</table>

Remarks: NOAEL F1

**Teratogenicity**

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>Inhalation OECD Test Guideline 414</td>
<td>Rabbit</td>
<td>500 mg/kg</td>
<td>18 days</td>
</tr>
</tbody>
</table>

Remarks: NOAEL
Inhalation OECD Test Guideline 414

<table>
<thead>
<tr>
<th>Remarks</th>
<th>NOAEL Maternity</th>
</tr>
</thead>
</table>

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**

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>NOAEC</td>
<td>Rat</td>
<td>150 mg/kg</td>
<td>OECD 453</td>
</tr>
</tbody>
</table>

Remarks: NOAEC

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>310 Ready</td>
<td>3.7 % - 29 d</td>
<td>Activated Sludge</td>
<td></td>
</tr>
</tbody>
</table>
Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Product/Ingredient Name</th>
<th>Species</th>
<th>Exposure</th>
<th>LogPow</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octamethylcyclotetrasiloxane</td>
<td>Fathead Minnow</td>
<td>28 d</td>
<td>12.40</td>
<td></td>
<td>low</td>
</tr>
</tbody>
</table>

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 be 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
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  
Revision date  
8-20-2015  
Version #  
06  
Further information  
Not available.  
Disclaimer  
SPI Reference Standards are sold for chemical test and assay purposes only, and NOT for human consumption. The information contained herein is applicable solely to the chemical substance when used as a SPI Reference Standard and does not necessarily relate to any other use of the substance described, (i.e. at different concentrations, in drug dosage forms, or in bulk quantities). SPI Reference Standards are intended for use by persons having technical skill and at their own discretion and risk. This information has been developed by SPI staff from sources considered reliable but has not been independently verified by the SPI.

www.siliconesplus.com  |  817-469-7777
Therefore, the SPI Convention cannot guarantee the accuracy of the information in these sources nor should the statements contained herein be considered an official expression. NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE is made with respect to the information contained herein.