SILTECH CORP.  
Safety Data Sheet  
Prepared in accordance with GHS standard & Annex II - EC regulation 1907/2006 and amendments

Silmer G-162A  
MSDS No: 6970.2  
Last Revision Date: January 25, 2016

SECTION 1. IDENTIFICATION

Material Identification: Silmer G-162A

Chemical Name: Silicone crosspolymer in Cyclopentasiloxane

Chemical Classification: Silicone

CAS #: 541-02-6 / 156065-02-0 / 200074-76-6

INCI Name: Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer
           (and) Behenyl Dimethicone/Bis-Vinylidimethicone Crosspolymer

Company Identification: Siltech Corp.

225 Wicksteed Avenue  
Toronto, Ontario  
Canada

M4H 1G5  
(416) 424-4567

Recommended Product Usage  
Cosmetic additive

SECTION 2. HAZARD(S) IDENTIFICATION

HAZARD CLASSIFICATION:  
Not Hazardous.

GHS LABEL ELEMENTS (including precautionary statements):  
Symbol: None.

Signal Word: None.

Hazard Risk Statement: Not Hazardous.

Precautionary Statement:

Prevention: P262: Do not get in eyes, on skin or on clothing.

Response: P305 + P351: IF IN EYES: Rinse with water for several minutes. Repeat if needed.
          P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

Storage: P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal: P501: Dispose of contents/container in accordance with local / regional / national / international regulations.

OTHER HAZARD (risk not included in classification):

Vapours may form explosive mixtures with air.
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name or Synonym</th>
<th>CAS No.</th>
<th>EINECS/ELINCS No.</th>
<th>% (w/w)</th>
<th>GHS Classification</th>
<th>Classification according to Directive 67-548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decamethylcyclotetrasiloxane</td>
<td>D5</td>
<td>541-02-6</td>
<td>208-764-9</td>
<td>80 - 95</td>
<td>Not hazardous</td>
<td>Not hazardous</td>
</tr>
<tr>
<td>Siloxanes and silicones, di-Me, Me hydrogen, reaction products with vinyl group-terminated di-Me siloxanes</td>
<td>Dimethicone/Vinyl Dimethicone Crosspolymer</td>
<td>156065-02-0</td>
<td>N/A</td>
<td>5 - 20</td>
<td>Not hazardous</td>
<td>Not hazardous</td>
</tr>
<tr>
<td>C20-C24-Alkyl dimethicone</td>
<td>Behenyl Dimethicone/ Bis-Vinyl dimethicone Crosspolymer</td>
<td>200074-76-6</td>
<td>N/A</td>
<td>0.5 - 5</td>
<td>Not hazardous</td>
<td>Not hazardous</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

**Eyes**: No first aid should be needed. If discomfort occurs, flush with water.

**Skin**: No first aid should be needed.

**Inhalation**: No first aid should be needed. If discomfort occurs, remove to fresh air.

**Ingestion**: No first aid should be needed. If discomfort occurs, obtain medical attention.

SECTION 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**: Carbon dioxide, dry powder, foam, or water spray. Water can be used to cool fire exposed containers.

**Unsuitable Extinguishing Media**: None known.

**Specific Hazards Arising from the Chemical**: Silicon Dioxide. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.

**Special Protective Actions for Fire-Fighters**: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Use water spray to cool fire exposed containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Protective Equipment**: Avoid eye and skin contact. Use personal protective equipment.

**Environmental Precautions**: Prevent from entering drains or water sources.

**Containment/Clean up**: Collect for disposal. Clean up remaining materials from spill with suitable absorbent. 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 area as appropriate since some silicone material, even in small quantities, may present a slip hazard. Final cleaning may require steam, solvents or detergents.

SECTION 7. HANDLING AND STORAGE

**Handling Precautions**: Avoid eye and skin contact. Do not take internally. Use with adequate ventilation. Wash after handling. Exercise good industrial hygiene practice.

**Storage Conditions**: Keep container tightly closed and away from oxidizing materials.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMIT VALUES / BIOLOGICAL LIMIT VALUES:

Industrial Hygiene Standards

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>None known.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS:
Local Ventilation: None should be needed.
General ventilation: Recommended.

PERSONAL PROTECTIVE EQUIPMENT:
Respiratory protection: In the case of vapour formation use a respirator with an approved filter.
Hand protection: Gloves are not normally required.
Eye protection: Safety glasses should be worn.
Skin protection: Protective equipment is not normally required.
Hygiene measures: Observe good industrial hygiene practices. Wash after handling.

Note: These precautions are for room temperature handling. Use at elevated temperatures or aerosol spray applications may require added precautions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance: Clear Gel</td>
<td></td>
</tr>
<tr>
<td>Colour: Colourless</td>
<td></td>
</tr>
<tr>
<td>Odour: Odourless</td>
<td></td>
</tr>
<tr>
<td>Odour Threshold: Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point: 77°C ( Pensky-Martens closed cup)</td>
<td>211°C @ 760 mmHg</td>
</tr>
<tr>
<td>Flammability: Not determined</td>
<td>0.015 kPa (D5)</td>
</tr>
<tr>
<td>Flammability Limits: Lower Limit – 0.70%</td>
<td>Vapour Pressure @25°C:</td>
</tr>
<tr>
<td>Auto-ignition Temperature: 392°C</td>
<td>45°C (D5)</td>
</tr>
<tr>
<td>Decomposition Temperature: Not determined</td>
<td>pH:</td>
</tr>
<tr>
<td>Specific Gravity @ 25°C: Not determined</td>
<td>Oxidising Properties: No</td>
</tr>
<tr>
<td>Solubility in Water: &lt; 0.05 mg/l (D5)</td>
<td>Evaporation Rate: &lt; 1 (D5)</td>
</tr>
<tr>
<td>Viscosity @ 25°C: 300,000 cps</td>
<td></td>
</tr>
<tr>
<td>Melting/Freezing Point: Not determined</td>
<td></td>
</tr>
<tr>
<td>Initial Boiling Point: 211°C @ 760 mmHg</td>
<td>Boiling Range: Not determined</td>
</tr>
<tr>
<td>Partition Coefficient &gt; 5 (D5)</td>
<td></td>
</tr>
<tr>
<td>pH: Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidising Properties: No</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate: &lt; 1 (D5)</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: None known.
Incompatible Materials: Strong oxidizing material can cause a reaction.

Hazardous Decomposition Products: The following decomposition products may form during fire or at very high temperatures:
Carbon Oxides, Silicon dioxide, Formaldehyde, and traces of incompletely burned carbon compounds.
SECTION 11. TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE:

- **Respiratory:** Exposure is expected.
- **Oral:** Exposure is expected.
- **Eye, Skin:** Exposure is expected.

INFORMATION ON THE HEALTH HAZARDS:

**Acute Toxicity:**

- **D5 - LC50:** (rat) Inhalation $\sim 8.67 \text{ mg/l} : 4\text{hr dust/mist}

**Eyes:** Direct contact may cause temporary redness and discomfort.

**Skin:** No significant irritation expected from a single short-term exposure.

**Inhalation:** No significant irritation expected from a single short-term exposure.

**Ingestion:** Low ingestion hazard in normal use.

**Chronic Toxicity:**

- **Skin:** No known applicable information.
- **Inhalation:** No known applicable information.
- **Ingestion:** Repeated ingestion or swallowing large amounts may injure internally.
- **Other Health Hazard:** No known applicable information.

**Skin Corrosion/Irritation:** No known applicable information.

**Serious Eye Damage/Irritation:** No known applicable information.

**Respiratory Sensitization:** No known applicable information.

**Skin Sensitization:** No known applicable information.

**Carcinogenicity:** No known applicable information.

**Germ Cell Mutagenicity:** No known applicable information.

**Reproductive Toxicity:** No known applicable information.

**Specific Target Organ:** No known applicable information.

(Systemic Toxicity $\sim$ Single exposure)

**Specific Target Organ:** No known applicable information.

(Systemic Toxicity $\sim$ Repeated exposure)

**Aspiration Hazard:** No known applicable information.
SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY:
Environmental Effects
Acute: No adverse effects on aquatic organisms.
Chronic: No adverse effects on aquatic organisms.

PERSISTENCE AND DEGRADABILITY:
Degradation: In soil, siloxanes are degraded.
Environmental Fate and Distribution: Siloxanes are removed from water by sedimentation sewage or binding to sludge.

BIOACCUMULATIVE POTENTIAL:
Bioaccumulation: No bioaccumulation potential.

MOBILITY IN SOIL:
None known.

OTHER ADVERSE EFFECTS:
None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Product Disposal: Do not dispose of waste into sewer. Dispose of in accordance with local regulations.

Packaging Disposal: Dispose of in accordance with local regulations.

SECTION 14. TRANSPORTATION INFORMATION

AIR TRANSPORT (IATA):
Not subject to IATA regulations.

SEA TRANSPORT (IMDG):
Not subject to IMDG code.

ROAD / RAIL
CANADA TDG: Not subject to TDG regulations.
ADR/RID: Not subject to ADR/RID regulations.

US DOT (49 CFR 172.101):
Applicable only to containers over 119 gallons or 450 liters.
Shipping Name: Combustible liquid, N.O.S. (Decamethylocyclopentasiloxane Solution)
Technical Name: Contains Cyclosiloxane
Primary Class: 3
Product Identification Number: UN 1993
Packing Group: III
SECTION 15. REGULATORY INFORMATION

CHEMICAL INVENTORIES:

TSCA: (USA) All ingredients are on or exempted (personal care) from the inventory.

DSL: (Canada) Not all ingredients currently listed.

EINECS: (EU) All ingredients are on or exempted (polymer) from the inventory.

AICS: (Australia) Not all ingredients currently listed.

IECSC: (China) All ingredients are on the inventory.

MITI: (Japan) Not all ingredients currently listed.

KECL: (Korea) Not all ingredients currently listed.

NZIoC: (New Zealand) Not all ingredients currently listed.

CSNN: (Taiwan) Not all ingredients currently listed.

PICCS: (Philippines) Not all ingredients currently listed.

CANADA
This product has been classified in accordance with the hazard criteria of the CPR, and this MSDS contains all the information required by the CPR.

WHMIS Classification: CLASS B – Division 3
CLASS D – Division 2A

USA
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

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 / New Jersey / Pennsylvania
No ingredients regulated by MA/NJ/PA Right-to-know Laws present.

EEC
Labelling according to EEC Directive
S-phrases: S51 (Use only in well-ventilated areas)
R-phrases: NONE

GERMANY
Wassergefährdungsklasse (water hazard class) : WGK 1
SECTION 16. OTHER INFORMATION

The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This data is offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby 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.

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