SECTION 1. IDENTIFICATION

Material Identification: SilPlex J2-S
Chemical Name: Polydimethylsiloxane Quaternary Polydimethylsiloxane Carboxy Complex
Chemical Classification: Mixture
CAS #: 280569-78-0 / 107-41-5
INCI Name: Silicone Quaternium-20

Company Identification: Siltech Corp.
225 Wicksteed Avenue
Toronto, Ontario
Canada
M4H 1G5
(416) 424-4567

Recommended Product Usage
Silicone Surfactant
Additive

SECTION 2. HAZARD(S) IDENTIFICATION

HAZARD CLASSIFICATION:
Skin Irritation Category 2
Eye Irritation Category 2

GHS LABEL ELEMENTS (including precautionary statements):

Symbol: !
Signal Word: Warning

Hazard Risk Statement:
H315: Causes skin irritation.
H319: Causes serious eye irritation

Precautionary Statement:
Prevention:
P261: Avoid breathing mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P271: Use in well ventilated area.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.

Response:
P351 + P313: IF IN EYES: Rinse cautiously with water for several minutes. Get medical advice/attention.
P302 + P350: 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): None known.
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS No.</th>
<th>EINECS/ELINCS No.</th>
<th>% (w/w)</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methyl-2,4-pentanediol</td>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>203-489-0</td>
<td>15 - 25</td>
<td>Skin irritation : Cat2</td>
</tr>
</tbody>
</table>

Other ingredients not listed in this section are non-hazardous or business confidential.

SECTION 4. FIRST AID MEASURES

**Eyes:** Immediately flush with water for 15 minutes. Obtain medical attention if irritation occurs.
**Skin:** Remove contaminated clothing and wash with soap and water. Obtain medical attention if irritation occurs.
**Inhalation:** If first aid is required move victim to fresh air.
**Ingestion:** Do not induce vomiting and obtain medical attention immediately.

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>Hexylene glycol</td>
<td>107 – 41- 5</td>
<td>ACGIH 2005, TLV-TWA: 25ppm</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS:
Local Ventilation: Recommended.
General ventilation: Recommended.

PERSONAL PROTECTIVE EQUIPMENT:
Respiratory protection: In the case of vapour formation use a respirator with an approved filter.
Hand protection: Chemical protective gloves are recommended (Rubber, Neoprene, or Nitrile).
Eye protection: Use proper protection - safety glasses as a minimum.
Skin protection: Impervious clothing.
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</td>
<td>Clear Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>102°C (Pensky-Martens closed cup)</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Specific Gravity @25°C</td>
<td>1.04</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Viscosity@25°C</td>
<td>400 – 1000 cps</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Initial Boiling Point</td>
<td>&gt;100°C @ 760 mmHg</td>
</tr>
<tr>
<td>Boiling Range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No</td>
</tr>
<tr>
<td>Vapour Pressure @25°C</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>No</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</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

Eyes: Direct contact may cause temporary redness and discomfort.
Skin: Hexylene glycol: (LD50 Dermal – rabbit 7,892mg/kg)
Inhalation: Excessive inhalation may cause respiratory irritation.
Ingestion: Hexylene glycol: (LD50 Oral – rat 3,700mg/kg)

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: Hexylene glycol: (rabbit skin irritation 24 h)
Serious Eye Damage/Irritation: Hexylene glycol: (rabbit severe eye irritation)
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 – Single exposure)
Specific Target Organ: No known applicable information.
(Systemic Toxicity – 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. |
SECTION 15. REGULATORY INFORMATION

CHEMICAL INVENTORIES:

- **TSCA**: (USA) Not currently listed. (personal care exempt)
- **DSL**: (Canada) Not currently listed.
- **EINECS**: (EU) All ingredients are on or exempted (polymer) from the inventory.
- **AICS**: (Australia) Not currently listed.
- **IECSC**: (China) Not currently listed.
- **MITI**: (Japan) Not currently listed.
- **KECL**: (Korea) Not currently listed.
- **NZIoC**: (New Zealand) Not currently listed.
- **CSNN**: (Taiwan) Not currently listed.
- **PICCS**: (Philippines) Not currently listed.

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 Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Massachusetts / New Jersey / Pennsylvania

Hexylene glycol CAS#107-41-5 15 - 25%

GERMANY

Wassergefährdungsklasse (water hazard class) : WGK 1

GHS

Hazard statement(s) and Precautionary statement(s)

- H315: Causes skin irritation.
- H319: Causes serious eye irritation
- P261: Avoid breathing mist/vapours/spray.
- P264: Wash hands thoroughly after handling.
- P271: Use in well ventilated area.
- P280: Wear protective gloves/ protective clothing/eye protection/face protection.

Hazard pictogram(s)
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.

<table>
<thead>
<tr>
<th>SDS prepared by:</th>
<th>Raj Moonsammy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Siltech Corp</td>
</tr>
<tr>
<td></td>
<td>225 Wicksteed Avenue</td>
</tr>
<tr>
<td></td>
<td>Toronto, Ontario, Canada M4H 1G5</td>
</tr>
<tr>
<td>Telephone:</td>
<td>(416) 424-4567</td>
</tr>
<tr>
<td>First Issuing Date:</td>
<td>August 14, 2013</td>
</tr>
<tr>
<td>Revision No.:</td>
<td>5</td>
</tr>
<tr>
<td>Latest Revision Date:</td>
<td>September 20, 2017</td>
</tr>
</tbody>
</table>