### SECTION 1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Material Identification:</th>
<th>Silmer H E4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name:</td>
<td>Polydimethylmethylhydrogensiloxane</td>
</tr>
<tr>
<td>Chemical Classification:</td>
<td>Silicone</td>
</tr>
<tr>
<td>CAS #:</td>
<td>68037-59-2</td>
</tr>
</tbody>
</table>

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

**Recommended Product Usage**
Polymer production
Intermediates

### SECTION 2. HAZARD(S) IDENTIFICATION

**HAZARD CLASSIFICATION:**
Not Hazardous.

**GHS LABEL ELEMENTS** (including precautionary statements):
- Symbol: None.
- Signal Word: None.
- 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):
Some hydrogen gas may be released. Hydrogen is flammable and can 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>No hazardous ingredients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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: Dry chemical.

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

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.

When the fire is put out, hydrogen may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited. Foam blankets may also trap hydrogen or flammable vapors, with the possibility of subsurface explosion.

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 water or moisture. Product evolves minute quantities of flammable gas which can accumulate. Adequately ventilate to maintain vapours well below flammability limits and exposure guidelines. Do not repackage. Keep container away from heat, sparks and flames.
### Section 8. Exposure Controls/Personal Protection

#### Occupational Exposure Limit Values / Biological Limit Values:

<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</td>
<td>Clear Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;100°C (Pensky-Martens closed cup)</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>Auto-ignition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH (10% in 70/20 IPA/DI water)</td>
<td>6.0 – 7.2</td>
</tr>
<tr>
<td>Specific Gravity @25°C</td>
<td>0.99</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

### Section 10. Stability and Reactivity

**Chemical Stability:** Stable under normal usage conditions. Material may decompose (generating heat and gas) if exposed to temperatures in excess of 250°C.  
**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.  
**Conditions to Avoid:** None known.  
**Incompatible Materials:** Oxidizing material can cause a reaction. Water, alcohols, acidic or basic materials, and many metals or metallic compounds, when in contact with product, liberate flammable hydrogen gas, which can form explosive mixtures in air.  
**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:** None known.
- **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 – 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: All ingredients are on the inventory.
- DSL: All ingredients are on the inventory.
- EINECS: All ingredients are on or exempted from the inventory.
- AICS: All ingredients are on the inventory.
- IECSC: All ingredients are on the inventory.
- MITI: All ingredients are on the inventory.
- KECL: All ingredients are on the inventory.
- CSNN: All ingredients are on the inventory.
- NZIoC: All ingredients are on the inventory.

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: This product is not subject to WHMIS regulations.

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.

KOREA

Classification and labelling in accordance with Industrial Safety and Health Law: No subject chemicals.
Chemicals controlled in accordance with Toxic Chemicals Control Act: No subject chemicals.
Hazardous Material Safety Management Act: No subject chemicals.
Wastes Management Act: Product should be disposed of in accordance with Waste Management Law Article 12.

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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First Issuing Date: September 06, 2012
Revision No.: 1
Latest Revision Date: September 06, 2012