1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

- **Product Name:** Silmer HQ 203
- **Product code:** 7051.203
- **Chemical Name:** Silicic acid (H₄SiO₄), tetraethyl ester, reaction products with chlorodimethylsilane
- **CAS No.:** 68988-57-8

1.2 Recommended use of the chemical and restrictions on use

- **Identified use(s):** PC19 Intermediate
- **Uses advised against:** None known

1.3 Details of the supplier of the Safety Data Sheet

- **Company Identification:** Siltech Corp
  225 Wicksteed Ave
  Toronto, ON Canada M4H 1G5
- **Telephone:** +1-416-424-4567
- **Fax:** +1-416-424-3158
- **E-Mail (competent person):** raj@siltech.com

- **Additional Location:** Siltech Corp
  3265 Wolfedale Road,
  Mississauga ON Canada L5C 1V8
- **Telephone:** +1-905-270-5534
- **Fax:** +1-905-270-5816

1.4 Emergency telephone number

- **Emergency Phone No.:** CANUTECH - TELEPHONE: EMERGENCY USE ONLY +1-613-996-6666

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

- **Flammable Liquid Category:** 4

2.2 Label elements

- **Product Name:** Silmer HQ 203
- **Symbol:** NONE
- **Signal word(s):** Warning
- **Hazard statement(s):** H227: Combustible liquid.

2.3 Other hazards

Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>Hazardous ingredient(s)</th>
<th>Synonym(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Hazard pictogram(s) and Hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid (H₄SiO₄), tetraethyl ester, reaction products with chlorodimethylsilane</td>
<td>MQ Hydride Resin</td>
<td>100</td>
<td>68988-57-8</td>
<td>273-531-0</td>
<td>H227</td>
</tr>
</tbody>
</table>
4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
- Inhalation: Unlikely to be required but if necessary treat symptomatically.
- Skin Contact: Unlikely to be required but if necessary treat symptomatically.
- Eye Contact: If substance has got into the eyes, immediately wash out with plenty of water for several minutes.
- Ingestion: If swallowed, seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed
Not available.

4.3 Indication of any immediate medical attention and special treatment needed
Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
- Suitable Extinguishing Media: In case of fire, use water spray, foam, dry powder or CO2 for extinction. Keep containers cool by spraying with water if exposed to fire.
- Unsuitable Extinguishing Media: None known

5.2 Special hazards arising from the substance or mixture
Silicon Dioxide, carbon oxides, incompletely burned carbon compounds, formaldehyde.

5.3 Advice for fire-fighters
A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Eliminate sources of ignition.

6.2 Environmental precautions
Avoid release to the environment.

6.3 Methods and material for containment and cleaning up
Caution - spillages may be slippery. Cover spills with inert absorbent material. Transfer to a container for disposal. See Section: 7 & 8.

6.4 Reference to other sections
See Section: 7 & 8.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid ingestion. Use only with sufficient ventilation. Wash thoroughly after handling. General hygiene measures for the handling of chemicals are applicable. Ground/bond container and receiving equipment.

7.2 Conditions for safe storage, including any incompatibilities
- Storage Temperature: Ambient
- Storage Life: Stable under normal conditions.
- Incompatible materials: Oxidizing agents
- Specific end use(s): Industrial use

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits
<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>CAS No.</th>
<th>LTEL (8 hr TWA ppm)</th>
<th>LTEL (8 hr TWA mg/m³)</th>
<th>STEL (ppm)</th>
<th>STEL (mg/m³)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>None assigned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.1.2 Biological limit value
None assigned

8.1.3 PNECs and DNELs
Not established

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Provide adequate ventilation.

8.2.2 Personal protection equipment

Eye/face protection
Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)
Wear suitable gloves if prolonged skin contact is likely.

Respiratory protection
No personal respiratory protective equipment normally required.

8.2.3 Environmental Exposure Controls
Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance
Colourless liquid.

Odour
Faint.

Odour Threshold
Not available.

pH
Not available.

Melting Point/Freezing Point
Not available.

Initial boiling point and boiling range
Not available.

Flash point (PMCC)
68°C

Evaporation rate
Not available.

Flammability (solid, gas)
Not applicable.

Upper/lower flammability or explosive limits
Not available.

Vapour pressure
Not available.

Vapour density
Not available.

Relative density / Specific Gravity (25°C)
0.984

Solubility(ies)
Insoluble in water.

Partition coefficient: n-octanol/water
Not available.

Auto-ignition temperature
Not available.

Decomposition Temperature
Not available.

Viscosity (25°C)
150 cps

Explosive properties
Not applicable.

Oxidising properties
Not applicable.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable under normal conditions.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Will not occur. Hydrogen may be formed.

10.4 Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials
Oxidizing agents.
10.6 Hazardous Decomposition Product(s)  
Silicon Dioxide, carbon oxides, incompletely burned carbon compounds, formaldehyde.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Low toxicity under normal conditions of handling and use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>Low toxicity under normal conditions of handling and use.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>None anticipated</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>None anticipated</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>None anticipated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects and Symptoms</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT - single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT - repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Delayed and chronic effects</td>
<td>Not available</td>
</tr>
<tr>
<td>Calculated acute toxicity estimate (ATE)</td>
<td>Not available</td>
</tr>
</tbody>
</table>

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity  
Not available.

12.2 Persistence and degradability  
Not available.

12.3 Bioaccumulative potential  
Not available.

12.4 Mobility in soil  
Not available.

12.5 Results of PBT and VPVB assessment  
Not available.

12.6 Other adverse effects  
None known

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Do not empty into drains; dispose of this material and its container in a safe way.

13.2 Additional Information  
 Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 Air (ICAO/IATA)  
Not classified as hazardous for air transport.  
**VENTED PACKAGES ARE FORBIDDEN FOR AIR TRANSPORT.**

14.2 Sea (IMDG)  
Not classified as hazardous for marine transport.

14.3 TDG / Road/Rail (ADR/RID)  
Not classified as hazardous for transport.

14.4 DOT / CFR (US Department of Transportation)  
Applicable only to containers > 119 gallons or 450L  
UN number    1993  
DOT Proper Shipping Name  
Combustible liquid, N.O.S. (Silicone Resin)  
Class 3 Packing group III

15. SECTION 15: REGULATORY INFORMATION

15.1 EU regulations  
REACH Registration No. Polymer exempt.

Candidate List of Substances of Very High Concern for Authorisation  
None.
15.2 International Inventories

<table>
<thead>
<tr>
<th>Country</th>
<th>Listed</th>
<th>Not listed</th>
<th>Polymer exempt</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (TSCA)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada (DSL/NDSL)</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union (EINECS/ELINCS)</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Australia (AICS)</td>
<td>✓</td>
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<tr>
<td>China (IECAS)</td>
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<td>Japan (ENCS)</td>
<td>✓</td>
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<td>South Korea (KECI)</td>
<td>✓</td>
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<tr>
<td>Taiwan (TCSI)</td>
<td>✓</td>
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</tr>
<tr>
<td>New Zealand (NZIoC)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines (PICCS)</td>
<td>✓</td>
<td></td>
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</tr>
</tbody>
</table>

15.3 National regulations

United States (TSCA)  
HMIS (Hazardous Material Information System)  
NFPA Rating  
TSCA Inventory Status: All chemicals in this product comply with TSCA rules and regulations including TSCA Section 5 (Inventory Rules).

HMIS (Hazardous Material Information System)  
NFPA Rating  
H = 1 / F = 2 / R = 1

15.4 US State Regulations

15.4.1 SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM  
None known.

15.4.2 SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER  
None known.

15.4.3 State Right to Know Lists  
None known.

16. SECTION 16: OTHER INFORMATION

Revision: January 04, 2019

LEGEND

LTEL Long Term Exposure Limit  
STEL Short Term Exposure Limit  
STOT Specific Target Organ Toxicity  
DNEL Derived No Effect Level  
PNEC Predicted No Effect Concentration  
PBT Persistent, Bioaccumulative and Toxic  
vPvB very Persistent and very Bioaccumulative

Hazard statement(s) and Precautionary statement(s)  
H227: Combustible liquid.  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P403+P235: Store in a well-ventilated place. Keep cool.  
P501: Dispose of contents/container to: Observe Local Regulations.

Hazard pictogram(s) and Hazard Symbol

NONE
Additional Information

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