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

1.1 Product identifier
   - **Product Name:** Silmer HQ 20
   - **Product code:** 7051.008
   - **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, PC32 Polymer preparations and compounds
   - **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 20
   - **Symbol:** NONE
   - **Signal word(s):** Warning
   - **Hazard statement(s):** H227: Combustible liquid.
   - **Precautionary statement(s):** 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.

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>
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</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

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

7.3 Specific end use(s)

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits
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 Thermal hazards

None.

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) 0.991

Solubility(ies)

Insoluble in water.

Partition coefficient: n-octanol/water

Not available.

Auto-ignition temperature

Not available.

Decomposition Temperature

Not available.

Viscosity (25°C) 12 – 20 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

**Acute toxicity**
- **Ingestion:** Low toxicity under normal conditions of handling and use.
- **Inhalation:** Low toxicity under normal conditions of handling and use.
- **Skin Contact:** None anticipated
- **Eye Contact:** None anticipated

**Effects and Symptoms**
- **Skin corrosion/irritation:** Not classified
- **Serious eye damage/irritation:** Not classified
- **Respiratory or skin sensitization:** Not classified
- **Germ cell mutagenicity:** Not classified
- **Carcinogenicity:** Not classified
- **Reproductive toxicity:** Not classified
- **STOT - single exposure:** Not classified
- **STOT - repeated exposure:** Not classified
- **Aspiration hazard:** Not classified
- **Delayed and chronic effects:** Not available
- **Calculated acute toxicity estimate (ATE):** Not available

### 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)
- **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

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<thead>
<tr>
<th>Country</th>
<th>Listed</th>
<th>Not listed</th>
<th>Polymer exempt</th>
<th>Other</th>
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<tr>
<td>United States (TSCA)</td>
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<tr>
<td>Canada (DSL/NDSL)</td>
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</tbody>
</table>

## 15.3 National regulations

**United States (TSCA)**  
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)**

- H = 1
- F = 2
- R = 1

**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

Disclaimers

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