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

1.1 Product identifier
   Product Name: Silquat 3452
   Product code: 4453
   Chemical Name: Mixture
   CAS No.: 588707-20-4 / 68603-42-9 / 68604-75-1 / 107-41-5 /
               111-76-2 / 57-55-6

1.2 Recommended use of the chemical and restrictions on use
   Identified use(s): Coatings
   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
   Acute Tox. 4 – Oral
   Acute Tox. 4 – Inhalation
   Acute Tox. 4 – Dermal
   Skin Irrit. 2
   Eye Irrit. 2

2.2 Label elements
   Product Name: Silquat 3452
   Symbol: WARNING

   Signal word(s): H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled
                   H315: Causes skin irritation.
                   H319: Causes serious eye irritation.

   Hazard statement(s):
   P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
   P264: Wash hands and exposed skin thoroughly after handling.
   P270: Do not eat, drink or smoke when using this product.
   P271: Use only outdoors or in a well-ventilated area.
   P280: Wear protective gloves/protective clothing/eye protection/face protection.
   P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
2.3 Other hazards

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

<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>2-Methyl-2,4-pentanediol</td>
<td>Hexylene glycol</td>
<td>10 - 25</td>
<td>107-41-5</td>
<td>203-489-0</td>
<td>GHS07 : H315, H319</td>
</tr>
<tr>
<td>2-butoxyethanol</td>
<td>Glycol ether EB</td>
<td>2 - 5</td>
<td>111-76-2</td>
<td>203-905-0</td>
<td>GHS07 : H227, H302, H312, H332, H315, H319</td>
</tr>
</tbody>
</table>

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If signs/symptoms continue, get medical attention.

Skin Contact
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.

Eye Contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

May cause irritation to skin, eyes and respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed

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.

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.

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.

7.2 Conditions for safe storage, including any incompatibilities
Store in a tightly closed container.

Storage Temperature
Ambient

Storage Life
Stable under normal conditions.

Incompatible materials
Oxidizing agents,

7.3 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>LTE (8 hr TWA ppm)</th>
<th>LTE (8 hr TWA mg/m³)</th>
<th>STEL (ppm)</th>
<th>STEL (mg/m³)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>20</td>
<td>240</td>
<td></td>
<td></td>
<td>Can be absorbed through skin.</td>
</tr>
</tbody>
</table>

8.1.2 Biological limit value
Not established

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 impervious gloves (EN374).

Respiratory protection
In case of inadequate ventilation wear respiratory protection. In order to avoid the inhalation from spray and abrasive dust, all spray and grinding works must be carried out with suitable respirator.

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 to yellowish liquid.
- **Odour**: Faint.
- **Odour Threshold**: Not available.
- **pH**: 3.5 – 6.5
- **Melting Point/Freezing Point**: Not available.
- **Initial boiling point and boiling range**: >100°C @ 760mmHg
- **Flash point (PMCC)**: >100°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)**: 0.95
- **Solubility(ies)**: Soluble - Dispersible in water.
- **Partition coefficient: n-octanol/water**: Not available.
- **Auto-ignition temperature**: Not available.
- **Decomposition Temperature**: Not available.
- **Viscosity (25°C)**: Not available.
- **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.

10.4 Conditions to avoid

- Keep away from oxidisers, heat, flames or ignition sources.

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**: May be harmful if swallowed.
  - **Inhalation**: May be harmful if inhaled.
  - **Skin Contact**: May be harmful in contact with skin.
  - **Eye Contact**: Causes eye irritation.

- **Effects and Symptoms**
  - **Skin corrosion/irritation**: Causes skin irritation.
  - **Serious eye damage/irritation**: Causes eye irritation.
  - **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 DOT / TDG / Road/Rail (ADR/RID): Not classified as hazardous for road transport.
14.2 Air (ICAO/IATA): Not classified as hazardous for air transport.
14.3 Sea (IMDG): Not classified as hazardous for marine transport.

15. SECTION 15: REGULATORY INFORMATION

15.1 EU regulations
REACH Registration No. Polymer exempt / Not available
Candidate List of Substances of Very High Concern for Authorisation Possible trace amounts of: < 0.1%
- Octamethylcyclotetrasiloxane (CAS# 556-67-2)
- Decamethylcyclopentasiloxane (CAS# 541-02-6)
- Dodecamethylcyclohexasiloxane (CAS# 540-97-6)

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>
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<tr>
<td>Australia (AICS)</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China (IECSC)</td>
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<td></td>
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<td>Japan (ENCS)</td>
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<td>South Korea (KECI)</td>
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<td>Taiwan (TCSI)</td>
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<td></td>
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<tr>
<td>Philippines (PICCS)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</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) NFPA Rating: H = 2 / F = 1 / R = 0

15.4 US State Regulations
15.5.1 SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.
15.5.2 SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: None known.
15.5.3 State Right to Know Lists: Hexylene glycol (CAS#107-41-5) : 10 - 25%
2-Butoxyethanol (CAS# 111-76-2) 2 – 5%
Octamethylcyclotetrasiloxane (CAS# 556-67-2) < 0.1%
16. SECTION 16: OTHER INFORMATION

Revision: January 10, 2020

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)
H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled
H315: Causes skin irritation.
H319: Causes serious eye irritation.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands and exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352: IF ON SKIN: Wash with plenty of water.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of contents/container to: Observe Local Regulations.

Hazard pictogram(s) and Hazard Symbol

Additional Information

Disclaimers
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