# SAFETY DATA SHEET

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

### 1.1 Product identifier
- **Product Name**: Silmer G-223 B
- **Product code**: 6972.73
- **Chemical Name**: Mixture
- **CAS No.**: 25550-51-0 / 34090-76-1

### 1.2 Recommended use of the chemical and restrictions on use
- **Identified use(s)**: intermediate use
- **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
- **Eye Dam. 1**
- **Skin Sens. 1**
- **Resp. Sens. 1**

### 2.2 Label elements
- **Product Name**: Silmer G-223 B
- **Symbol**: DANGER

#### Signal word(s)
- **DANGEROUS**

#### Hazard statement(s)
- H318: Causes serious eye damage.
- H317: May cause an allergic skin reaction.
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Precautionary statement(s)
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P285: In case of inadequate ventilation wear respiratory protection.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P302+P352: IF ON SKIN: Wash with plenty of water.
- P333+P313: If skin irritation or rash occurs: Get medical attention.
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>Hexahydromethylphthalic anhydride</td>
<td>MHHPA</td>
<td>90 - 100</td>
<td>25550-51-0</td>
<td>247-094-1</td>
<td>GHS08, GHS05 H318, H317, H334</td>
</tr>
<tr>
<td>Methyltetrahydrophthalic Anhydride</td>
<td>4-MTHPA</td>
<td>&lt; 10</td>
<td>34090-76-1</td>
<td>251-823-9</td>
<td>GHS08, GHS05 H318, H317, H334</td>
</tr>
<tr>
<td>1-methylimidazole</td>
<td></td>
<td>&lt; 0.5</td>
<td>616-47-7</td>
<td>210-484-7</td>
<td>GHS05, GHS07 H302, H312, H314, H318</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. Get medical attention. If breathing is difficult give oxygen. If person is not breathing, call 999 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation develops and persists, get medical attention.

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

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

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: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

No information available.

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

7.2 Conditions for safe storage, including any incompatibilities
Store in a tightly closed container. Keep away from heat and light.

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>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
Not established

8.1.3 PNECs and DNELs
Not established

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures.

8.2.2 Personal protection equipment
Eye/face protection
Safety spectacles/goggles/full face shield.

Skin protection (Hand protection/ Other)
Wear impervious gloves (EN374).
Nitrile rubber, Polyethylene, PVC
Wear suitable protective clothing.

Respiratory protection
Use NIOSH approved respiratory protection.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colourless to yellowish liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic odour.</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>10°C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point (PMCC)</td>
<td>149°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density / Specific Gravity (20°C)</td>
<td>1.17</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Reacts with water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity (25°C)</td>
<td>100 cps</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

## 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
Reacts with water.

### 10.4 Conditions to avoid

### 10.5 Incompatible materials
Oxidizing agents. Alcohols, Acids, Alkaline, Water

### 10.6 Hazardous Decomposition Product(s)
Carbon oxides may be formed. (>220°C)

## 11. SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Exposure</th>
<th>LD50 (oral, rat) mg/kg:</th>
<th>LD50 (dermal) mg/kg:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>&gt;2000</td>
<td>&gt;2000</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Not classified</td>
<td></td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Causes serious eye damage.</td>
<td></td>
</tr>
</tbody>
</table>

#### Effects and Symptoms

<table>
<thead>
<tr>
<th>Condition</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.</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: ECOTOXICOLOGICAL 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. Not classified as hazardous for rail 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. Not available.

Candidate List of Substances of Very High Concern for Authorisation
Hexahydromethylphthalic anhydride (CAS# 25550-51-0): 90 – 100%

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>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China (IECSO)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan (ENCS)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Korea (KECI)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taiwan (TCSI)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</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>
<td></td>
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</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)  H = 3 / F = 1 / R = 1
NFPA Rating                                  H = 3 / F = 1 / 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.
SECTION 16: OTHER INFORMATION

Revision: November 28, 2018

LEGEND

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTEL</td>
<td>Long Term Exposure Limit</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit</td>
</tr>
<tr>
<td>STOT</td>
<td>Specific Target Organ Toxicity</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No Effect Level</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No Effect Concentration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and</td>
</tr>
<tr>
<td></td>
<td>Toxic</td>
</tr>
<tr>
<td>vPVb</td>
<td>very Persistent and very</td>
</tr>
<tr>
<td></td>
<td>Bioaccumulative</td>
</tr>
</tbody>
</table>

Hazard statement(s) and Precautionary statement(s)

H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Hazard pictogram(s) and Hazard Symbol

![GHS08](image)

Additional Information

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