



# SILTECH CORP.

## Safety Data Sheet

Prepared in accordance with GHS standard  
& Annex II - EC regulation 1907/2006 and amendments

Silmer G223-B  
SDS No: 6972.73

Last Revision Date: December 18, 2014

### SECTION 1. IDENTIFICATION

**Material Identification:** Silmer G223-B

**Chemical Name:** Methylhexahydrophthalic Anhydride

**Chemical Classification:** Alicyclic Anhydride

**CAS #:** 25550-51-0

**Company Identification:** Siltech Corp.

225 Wicksteed Avenue

Toronto, Ontario

Canada

M4H 1G5

(416) 424-4567

**Recommended Product Usage**

Intermediate

Polymer production

**CANUTEC 24-HOUR EMERGENCY RESPONSE TELEPHONE NUMBER: (613) 996-6666**

**USE IN CASE OF A DANGEROUS GOODS EMERGENCY**

### SECTION 2. HAZARD(S) IDENTIFICATION

**HAZARD CLASSIFICATION:**

Skin Sensitization Category 1

Eye Damage Category 1

Respiratory Sensitization Category 1

**GHS LABEL ELEMENTS** (including precautionary statements):

Symbol :



Signal Word:

Warning

Hazard Risk Statement:

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statement:

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use in well ventilated area.

P280: Wear protective gloves/ protective clothing/eye protection/face protection.

Response:

P303+P351+P313: IF IN EYES: Rinse cautiously with water for several minutes.  
Get medical advice/attention.

P302 + P352: IF ON SKIN: Wash with plenty of 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):

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Common Name or Synonym</u>	<u>CAS No.</u>	<u>EINECS/ ELINCS No.</u>	<u>% (w/w)</u>	<u>GHS Classification</u>	<u>Classification according to Directive 67-548/EEC</u>
Methylhexahydrophthalic anhydride	MHHPA	25550-51-0	247-094-1	> 99.0	Skin sensitization: Category 1 Eye damage: Category 1 Respiratory sensitization: Category 1	Xn R41 R42/43 R52 R53

### SECTION 4. FIRST AID MEASURES

**Eyes:** Immediately flush with water for 15 minutes. Obtain medical attention if irritation occurs.

**Skin:** Remove contaminated clothing and wash with soap and water. Obtain medical attention if irritation occurs.

**Inhalation:** If first aid is required move victim to fresh air.

**Ingestion:** Do not induce vomiting and obtain medical attention immediately.

### 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:** None known.

**Specific Hazards Arising from the Chemical:** Material reacts with water or steam to form methylhexahydrophthalic acid. This reaction is slightly exothermic, which should not present any problems if large quantities of water are used.

**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.

### 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 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 oxidizing materials. Containers should be grounded and/or bonded when material is transferred. Store in cool, dry place. Keep away from heat, sparks, flames.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMIT VALUES / BIOLOGICAL LIMIT VALUES:

#### Industrial Hygiene Standards

<u>Ingredient</u>	<u>CAS No.</u>	<u>Exposure Limit</u>
None known.		

#### ENGINEERING CONTROLS:

Local Ventilation: Recommended.  
General ventilation: Recommended.

#### PERSONAL PROTECTIVE EQUIPMENT:

Respiratory protection: In the case of vapour formation use a respirator with an approved filter.  
Hand protection: Chemical protective gloves are recommended (Rubber, Neoprene, or Nitrile).  
Eye protection: Use proper protection - safety glasses as a minimum.  
Skin protection: Impervious clothing.  
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

<u>Appearance:</u>	Clear Liquid	<u>Viscosity@25°C:</u>	100 cps
<u>Colour:</u>	Light Yellow	<u>Melting/Freezing Point:</u>	Not determined
<u>Odour:</u>	Characteristic	<u>Initial Boiling Point:</u>	145°C @ 3 mmHg
<u>Odour Threshold:</u>	Not determined	<u>Boiling Range:</u>	Not determined
<u>Flash Point:</u>	149°C (Pensky-Martens closed cup)	<u>Explosive Properties:</u>	No
<u>Flammability:</u>	Not determined	<u>Vapour Pressure @25°C:</u>	Not determined
<u>Flammability Limits:</u>	Not determined	<u>Vapour Density</u>	Not determined
<u>Auto-ignition Temperature:</u>	Not determined	<u>Partition Coefficient</u>	Not determined
<u>Decomposition Temperature:</u>	Not determined	<u>pH:</u>	Not determined
<u>Specific Gravity @20°C:</u>	1.16	<u>Oxidising Properties:</u>	No
<u>Solubility in Water:</u>	Reacts slowly with water	<u>Evaporation Rate:</u>	Not determined

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** None known.

**Incompatible Materials:** Water, alcohols, acids, bases and oxidizers.

**Hazardous Decomposition Products:** The following decomposition products may form during fire or at very high temperatures (> 220°C): Oxides of carbon

## 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

**Eyes:** Direct contact may cause temporary redness and discomfort.

**Skin:** Direct contact may cause temporary redness and discomfort.

**Inhalation:** Excessive inhalation may cause respiratory irritation.

**Ingestion:** No known applicable information.

#### 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:** Direct contact may cause temporary redness and discomfort.

**Serious Eye Damage/Irritation:** Direct contact may cause temporary redness and discomfort.

**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

- US DOT (49 CFR 172.101):** Not subject to DOT regulations.  
**CANADA TDG:** Not subject to TDG regulations.  
**ADR/RID:** Not subject to ADR/RID regulations.

## SECTION 15. REGULATORY INFORMATION

### CHEMICAL INVENTORIES:

<b>TSCA:</b>	(USA)	All ingredients are on the inventory.
<b>DSL:</b>	(Canada)	All ingredients are on the inventory.
<b>EINECS:</b>	(EU)	All ingredients are on the inventory.
<b>IECSC:</b>	(China)	All ingredients are on the inventory.
<b>MITI:</b>	(Japan)	All ingredients are on the inventory.
<b>KECL:</b>	(Korea)	All ingredients are on the inventory.
<b>NZIoC:</b>	(New Zealand)	All ingredients are on the inventory.
<b>CSNN:</b>	(Taiwan)	All ingredients are on the inventory.
<b>PICCS:</b>	(Philippines)	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: CLASS D Division 2B.**

### USA

#### **EPA SARA Title III Chemical Listings:**

Section 302 Extremely Hazardous Substances (40 CFR 355):	<b>None</b>
Section 304 CERCLA Hazardous Substances (40 CFR 302):	<b>None</b>
Section 311/312 Hazard Class (40 CFR 370):	Acute: <b>No</b> ; Chronic: <b>No</b> ; Fire: <b>No</b> ; Pressure: <b>No</b> ; Reactive: <b>No</b>
Section 313 Toxic Chemicals (40 CFR 372):	<b>None</b>

### 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**

**None known.**

HMIS		NFPA	
<b>H</b>	2	1	1
<b>F</b>	1	2	1
<b>R</b>	1	0	1

### EEC

#### **Labelling according to EEC Directive**

**Symbols:** Xn (Harmful)

**R-phrases:** R41 (Risk of serious damage to eyes) | R42/43 (May cause sensitization by inhalation and skin contact) | R52/53 (Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment)

**S-phrases:** S24 (Avoid contact with skin) | S26 (In case of contact with eyes, rinse immediately with plenty of water and seek medical advice) | S37/39 (Wear suitable gloves and eye/face protection) | S61 (Avoid release to the environment)

**SVHC:** Hexahydromethylphthalic anhydride (CAS# 25550-51-0) is listed on the ECHA Candidate list of SVHC.

## 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.

**SDS prepared by:** Raj Moonsammy

**Address:** Siltech Corp  
225 Wicksteed Avenue  
Toronto, Ontario, Canada M4H 1G5

**Telephone:** (416) 424-4567

**First Issuing Date:** December 18, 2014

**Revision No.:** 1

**Latest Revision Date:** December 18, 2014

*This is the last page.*