



SILTECH CORP.

Safety Data Sheet

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

Silquat 3452
SDS No: 4453

Last Revision Date: October 30, 2015

SECTION 1. IDENTIFICATION

Material Identification: Silquat 3452

Chemical Name: Quaternary Polydimethylsiloxane

Chemical Classification: Silicone

CAS #: 588707-20-4 / 68603-42-9 / 68604-75-1 /
107-41-5 / 111-76-2

Recommended Product Usage

Additive

Company Identification: Siltech Corp.

225 Wicksteed Avenue
Toronto, Ontario
Canada
M4H 1G5
(416) 424-4567

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:

Acute Toxicity	Category 3	Dermal , Inhalation
Acute Toxicity	Category 4	Oral
Skin irritation	Category 2	
Eye Irritation	Category 2	

GHS LABEL ELEMENTS (including precautionary statements):

Symbol :



Signal Word:

Danger

Hazard Risk Statement:

H311: Toxic in contact with skin.
H331: Toxic if inhaled.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.

Precautionary Statement:

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.

Response:

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351
+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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>
2-Butoxyethanol	Glycol ether EB	111-76-2	203-905-0	2 - 5	Acute Toxicity: Category 3: dermal Acute Toxicity: Category 3: inhalation Acute Toxicity: Category 4: oral Skin irritation: Category 2 Eye irritation : Category 2	Xn R20/21/22 R36/38
2-Methyl-2,4-pentanediol	Hexylene glycol	107-41-5	203-489-0	10 - 25	Skin irritation : Category 2 Eye irritation : Category 2	Xi R36/38

Other ingredients not listed in this section are non-hazardous or business confidential.

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: Induce vomiting, give victim copious amounts of water 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: Silicon Dioxide. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.

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 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 silicone 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.

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>
2-Butoxyethanol	111-76-2	ACGIH : 20ppm TLV-TWA / OSHA : 50ppm, skin, PEL-TWA
Hexylene Glycol	107-41-5	ACGIH 2005, TLV-TWA : 25 ppm

ENGINEERING CONTROLS:

Local Ventilation: Required.
General ventilation: Required.

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 (Butyl 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 to Hazy Liquid	<u>Viscosity@25°C:</u>	Not determined
<u>Colour:</u>	Yellow	<u>Melting/Freezing Point:</u>	Not determined
<u>Odour:</u>	Mild	<u>Initial Boiling Point:</u>	>100°C @ 760 mmHg
<u>Odour Threshold:</u>	Not determined	<u>Boiling Range:</u>	Not determined
<u>Flash Point:</u>	>100°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>	3.5 – 6.5 (1% in DW)
<u>Specific Gravity @25°C:</u>	0.95	<u>Oxidising Properties:</u>	No
<u>Solubility in Water:</u>	Soluble	<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: Avoid excessive heat, open flames and all ignition sources.

Incompatible Materials: Strong oxidizing material can cause a reaction.

Hazardous Decomposition Products: The following decomposition products may form during fire or at very high temperatures: Carbon Oxides, Silicon dioxide, Formaldehyde, and traces of incompletely burned carbon compounds.

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 severe irritation.

Skin: 2-Butoxyethanol: (LD50 Dermal ó rabbit ó 220 mg/kg)

Inhalation: 2-Butoxyethanol (LC50 Oral ó rat ó 2.17 mg/l ó 4h)

Ingestion: 2-Butoxyethanol (LD50 Oral ó rat ó 470 mg/kg)

Chronic Toxicity

Skin: No known applicable information.

Inhalation: No known applicable information.

Ingestion: No known applicable information.

Other Health Hazard No known applicable information.

Skin Corrosion/Irritation: Hexylene glycol: (rabbit ó skin irritation ó 24 h)

Serious Eye Damage/Irritation: Hexylene glycol: (rabbit ó severe eye irritation)

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 ó Single exposure)

Specific Target Organ: No known applicable information.
(Systemic Toxicity ó Repeated exposure)

Aspiration Hazard: No known applicable information.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Environmental Effects

Acute: 2-Butoxyethanol : LC50 96h (fish) 1370 mg/L (median)
2-Butoxyethanol : LC50 48h (crustaceans) 800 mg/L

Chronic: No known applicable information.

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.
Organic solvents may evaporate into atmosphere and degrade.

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

CANADA TDG: Not subject to TDG regulations.

ADR/RID: Not subject to ADR/RID regulations.

US DOT (49 CFR 172.101): Not subject to DOT regulations.

SECTION 15. REGULATORY INFORMATION

CHEMICAL INVENTORIES:

TSCA: (USA)	All ingredients are on the inventory.
DSL: (Canada)	All ingredients are on the inventory.
EINECS: (EU)	All ingredients are on or exempted (polymer) from the inventory.
CSNN: (Taiwan)	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 1A
CLASS D Division 2B

USA

EPA SARA Title III Chemical Listings:

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

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

2-Butoxyethanol (CAS# 111-76-2) 2 - 5%
Hexylene glycol (CAS#107-41-5) 10 - 25%

HMIS	
H	2
F	1
R	0



EEC

Labelling according to EEC Directive

Symbols: Xn (Harmful) / Xi (Irritant)

R-phrases: R20/21/22 (Harmful by inhalation, in contact with skin and if swallowed) | R36/38 (Irritating to eyes and skin)

S-phrases: S24 (Avoid contact with skin) | S26 (In case of contact with eyes, rinse immediately with plenty of water and seek medical advice)

GERMANY

Wassergefährdungsklasse (water hazard class) : WGK 1

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.

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