

**Safety Data Sheet**

**Silmet GICs – ProGlass Plus Liquid & Powder (Classification according to Directive 790/2009/EC)**

**Date of issue: 07.11.13**

**Replaces version of : 30.05.2010**

**Rev. 2**

**ProGlass Plus –Liquid**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Manufacturer: Silmet Ltd.  
 Address: 12 Hassadna St.  
 Industrial Zone, Or Yehuda  
 60200 Israel  
 Telephone: + 972 3 5331474

Common name: ProGlass Plus – Liquid  
 Chemical name: N.A

**Product use:**  
 Intended Use: Dental product  
 Limitations on use: For use by dental professionals  
 Specific Use: Reinforced glass ionomer cement – liquid component

*The information below is provided with regard to the toxicity and hazards of the pure components present in this portion of the unmixed powder/liquid system.*

**SECTION 2: INGREDIENTS**

Component	C.A.S	Exposure limits	LD50/LC50	%
Distilled water	7732-18-15	N.E	N.E	20-30
Polyacrylic acid	9003-01-4	TWA = 10ppm (ACGIH)	LD50=2500mg/kg (oral rat) LC50=N.E	20-30
2-Hydroxyethylmethacrylate	868-77-9	N.E	LD50=5888mg/kg (oral rat) LC50=N.E	25-35
Urethanedimethacrylate	72869-86-4	N.E	N.E	5-10

**SECTION 3: HAZARDS IDENTIFICATION**

	Yes	No	NE	NA	NTP	IARC	OSHA	Other
<b>Mutagenic affects</b>		X						
<b>Teratogenic affects</b>		X						
<b>Reproductive toxin</b>		X						
<b>Carcinogenicity</b>		X						
<b>Sensitizer</b>		X						

**Routes of entry:**  Inhalation  Skin  Ingestion

**Health hazard(acute & chronic):** Acidic solution (pH=1.90), care should be taken to avoid contact with skin or eyes.

**SECTION 4: FIRST AID MEASURES**

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.  
**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, seek medical assistance  
**After swallowing:** If symptoms persist, seek medical assistance

**SECTION 5: FIRE FIGHTING MEASURES**

<b>Flash point</b> Not flammable	<b>Hazardous combustion products:</b> Emits acrid smoke when heated beyond boiling point. <b>Special Fire Fighting Procedures:</b> Full protective clothing and self contained breathing apparatus.
<b>Flammable Limits</b> N.A	
<b>Extinguishing media:</b> Alcohol foam	
<b>Unusual fire &amp; Exposure hazards</b> None	

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**In case of release or spill:** Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation

**Do not allow to enter sewers/ surface or ground water**

**Storage, handling and special precautions:** Store in a cool dry place in tightly closed container.

**SECTION 7: HANDLING AND STORAGE**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Store in a cool dry place in tightly closed container.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Engineering controls**

Use in a well-ventilated area.

**8.2 Personal Protective Equipment (PPE)**

**Eye/Face Protection**

Avoid eye contact.

The following eye protection(s) are recommended: Safety Glasses with side shields.

**Prevention of Swallowing**

Do not ingest. Wash hands after handling and before eating

**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance & odour** Colorless, slightly viscous and odorless liquid

**Specific gravity (H<sub>2</sub>O=1)** 1.18

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable.

**Self-igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Density:** Not determined

**SECTION 10: STABILITY AND REACTIVITY**

**Stability :**  Stable  Unstable

**Polymerization:**  Will Not Occur  Will Occur

**Conditions to avoid:** High heat

**Incompatibility (Materials to Avoid):** Alkali will inactivate product

**Hazardous decomposition or by-products:** N.E.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the 1<sup>st</sup> page of the MSDS for the Toxicological information on this material and/or its components

**SECTION 12: ECOLOGICAL INFORMATION**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

Do not dispose together with household garbage. Do not allow product to reach sewage system.

Recommendation: Consult applicable regulations or authorities before disposal.

**SECTION 14: TRANSPORTATION INFORMATION**

Please contact the number listed on the 1<sup>st</sup> page of this MSDS for Transport Information of this material

**SECTION 15: REGULATORY INFORMATION**

This product is classified as a medical device under US and EU regulations. The product has been marked in accordance with EU Directives and has been reviewed by the US Food and Drug Administration.

**US FEDERAL REGULATIONS**

**311/312 Hazard Categories:**

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

**CHEMICAL INVENTORIES**

Commercial use of this material is regulated by the FDA

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

**SECTION 16: OTHER INFORMATION**

**CAUTION: PRODUCT FOR PROFESSIONAL USE**

The information on this safety sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this sheet or use of this product together with any other process/procedure will be exclusively under the user's responsibility.

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**ProGlass Plus –Powder**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Manufacturer: Silmet Ltd.  
 Address: 12 Hassadna St.  
 Industrial Zone, Or Yehuda  
 60200 Israel  
 Telephone: + 972 3 5331474

Common name: ProGlass Plus – Powder  
 Chemical name: N.A

**Product use:**  
 Intended Use: Dental product  
 Limitations on use: For use by dental professionals  
 Specific Use: Reinforced glass ionomer cement – powder component

*The information below is provided with regard to the toxicity and hazards of the pure components present in this portion of the unmixed powder/liquid system.*

**SECTION 2: INGREDIENTS**

Component	C.A.S	Exposure limits	LD50/LC50	%
Alumino-silicate glass	Not listed	TLV =10mg/m <sup>3</sup> PEL = 15mg/m <sup>3</sup> (ACGIH)	N.E N.E	95 - 100

**SECTION 3: HAZARDS IDENTIFICATION**

	Yes	No	NE	NA	NTP	IARC	OSHA	Other
<b>Mutagenic affects</b>		X						
<b>Teratogenic affects</b>		X						
<b>Reproductive toxin</b>		X						
<b>Carcinogenicity</b>		X						
<b>Sensitizer</b>		X						

**Routes of entry:**  **Inhalation**  **Skin**  **Ingestion**

**Health hazard(acute & chronic):** Contains silica glass which is considered a hazard by inhalation. IARC has classified it as a probable carcinogenic for humans. Dusts of silica glass is also a known cause of silicosis, a non-cancerous lung disease.

**Signs & symptoms of overexposure:** Irritation and soreness in throat and nose.

**Conditions generally aggravated by exposure:** May aggravate preexisting upper respiratory and lung disease.

**Emergency first aid procedures:**  
**Inhalation:** Remove to fresh air, drink water to clear throat and blow nose to evacuate dust.  
**Ingestion:** Do not induce vomiting – give large volumes of water. Seek medical attention.  
**Skin:** Wash with soap and water. If irritation develops seek medical attention.  
**Eyes:** Flush with water for 15 minutes . If irritation develops or persists seek medical attention.

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**SECTION 4: FIRST AID MEASURES**

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.  
**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, seek medical assistance  
**After swallowing:** If symptoms persist, seek medical assistance

**SECTION 5: FIRE FIGHTING MEASURES**

<b>Flash point</b> Not flammable <b>Flammable Limits</b> N.A <b>Extinguishing media:</b> Alcohol foam <b>Unusual fire &amp; Exposure hazards</b> None	<b>Hazardous combustion products:</b> Emits acrid smoke when heated beyond boiling point. <b>Special Fire Fighting Procedures:</b> Full protective clothing and self contained breathing apparatus.
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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**In case of release or spill:** Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust).  
 Ensure adequate ventilation  
**Do not allow to enter sewers/ surface or ground water**  
**Storage, handling and special precautions:** Store in a cool dry place in tightly closed container.

**SECTION 7: HANDLING AND STORAGE**

Ensure good ventilation/exhaustion at the workplace.  
 Prevent formation of aerosols.  
 Store in a cool dry place in tightly closed container.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Engineering controls**  
 Use in a well-ventilated area.

**8.2 Personal Protective Equipment (PPE)**

**Eye/Face Protection**  
 Avoid eye contact.  
 The following eye protection(s) are recommended: Safety Glasses with side shields.

**Prevention of Swallowing**  
 Do not ingest. Wash hands after handling and before eating

**General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point</b> N.E <b>Vapour pressure</b> N.A <b>Vapour density</b> N.A <b>Solubility in water</b> Insoluble <b>Appearance &amp; odour</b> Very fine white powder	<b>Specific gravity (H<sub>2</sub>O=1)</b> 2.56 <b>Melting point</b> 1,350°C <b>Evaporation rate</b> N.A <b>Odor threshold</b> N.E <b>Coefficient of oil/water distribution</b> N.E
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**10: STABILITY AND REACTIVITY**

**Stability :**  Stable  Unstable

**Polymerization:**  Will Not Occur  Will Occur

**Conditions to avoid:** High heat  
**Incompatibility (Materials to Avoid):** Alkali will inactivate product.  
**Hazardous decomposition or by-products:** N.E.

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**SECTION 12: ECOLOGICAL INFORMATION**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Do not dispose together with household garbage. Do not allow product to reach sewage system.  
Recommendation: Consult applicable regulations or authorities before disposal.

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