























**Other hazards which do not result in GHS classification:** Chemical compounds containing silicon - hydrogen bonds (SiH). This product may generate hydrogen gas. For further information, refer to Section 10: "Stability and Reactivity".

### 3. Composition/information on ingredients

#### Mixtures

**Composition Comments:** Mixture of Polyorganosiloxanes, fillers, additives.

### 4. First-aid measures

**General information:** For further information refer to section 8 "Exposure-controls/personal protection".

**Ingestion:** Do not induce vomiting. Rinse mouth thoroughly. Get medical attention if symptoms occur.

**Inhalation:** Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Skin Contact:** Immediately wipe excess material off skin with a dry cloth; Wash skin thoroughly with soap and water. Get medical attention if symptoms occur after washing.

**Eye contact:** In case of contact, immediately absorb excess with clean absorbent cloth or cotton. In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Get medical attention if irritation persists after washing.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** None known.

**Hazards:** No specific recommendations.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** No specific recommendations.

### 5. Fire-fighting measures

**General Fire Hazards:** Water spray should be used to cool containers.

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Dry chemical, alcohol resistant foam or carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire. Do not use alkaline powders.

**Specific hazards arising from the chemical:** Product will burn under fire conditions. This product may generate hydrogen gas. Vapors may form explosive mixtures with air. For further information, refer to Section 10: "Stability and Reactivity". Hazardous Decomposition Products : formaldehyde, oxides of carbon and silica.

#### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** Water spray should be used to cool containers.

**Special protective equipment for fire-fighters:** Firefighters should wear standard protective equipment and a positive pressure self-contained breathing apparatus (SCBA). and full protective clothing.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Wear appropriate personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Avoid contact with alkalis and caustic products. Eliminate all sources of ignition.

**Methods and material for containment and cleaning up:** Ventilate the area. Use non-sparking tools. Absorb with sand or other inert absorbent. Avoid contact with bases. Scrape up and place in appropriate vented container.

**Notification Procedures:** Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

**Environmental Precautions:** Do not allow to enter drains, sewers or watercourses.

## 7. Handling and storage

**Precautions for safe handling:** Provide adequate ventilation if fumes or vapors are generated. Do not mix with incompatible materials. For further information, refer to Section 10: "Stability and Reactivity". Read and follow manufacturer's recommendations.

**Conditions for safe storage, including any incompatibilities:** Store in original vented container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Quartz/cristobalite : When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use.

**Appropriate Engineering Controls** No special requirements under ordinary conditions of use and with adequate ventilation.

### Individual protection measures, such as personal protective equipment

**General information:** Provide sufficient ventilation during operations which cause vapor formation. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air.

**Eye/face protection:** Wear approved chemical safety glasses.

#### Skin Protection

**Hand Protection:** Protective gloves are recommended.

**Other:** Wear suitable protective clothing.

- Respiratory Protection:** No protection is ordinarily required under normal conditions of use and with adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.
- Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

#### Appearance

<b>Physical state:</b>	Liquid
<b>Form:</b>	Viscous
<b>Color:</b>	Depends on the pigment.
<b>Odor:</b>	Slight
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	Not applicable.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	> 390 °F (199 °C) (Tagliabue Closed Cup)
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability limit - upper (%):</b>	74 %(V) Hydrogen.
<b>Flammability limit - lower (%):</b>	4 %(V) Hydrogen.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	1.23 (77 °F (25 °C))
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

- Reactivity:** No data available.
- Chemical Stability:** Material is stable under normal conditions.
- Possibility of hazardous reactions:** This product may generate hydrogen gas.
- Conditions to avoid:** Avoid heat, sparks, open flames and other ignition sources.
- Incompatible Materials:** A fire or explosion hazard arises because highly flammable gas (hydrogen) is released when it is in contact with : Strong oxidizers, strong bases and chemical compounds with mobile hydrogen, in the presence of metal salts and complexes.

**Hazardous Decomposition Products:** Thermal decomposition may release oxides of carbon. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air.  
Quantity of hydrogen potentially released (l/kg of product): < 5

## 11. Toxicological information

### Information on likely routes of exposure

**Ingestion:** No effects expected (assessment based on ingredients).  
**Inhalation:** No effects expected (assessment based on ingredients).  
**Skin Contact:** No effects expected (assessment based on ingredients).  
**Eye contact:** No effects expected (assessment based on ingredients).

### Symptoms related to the physical, chemical and toxicological characteristics

**Ingestion:** No data available.  
**Inhalation:** No data available.  
**Skin Contact:** No data available.  
**Eye contact:** No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

**Oral**  
**Product:** No data available.  
**Dermal**  
**Product:** No data available.  
**Inhalation**  
**Product:** No data available.

**Repeated dose toxicity**  
**Product:** No effects expected (assessment based on ingredients).

**Skin Corrosion/Irritation**  
**Product:** No effects expected (assessment based on ingredients).

**Serious Eye Damage/Eye Irritation**  
**Product:** No effects expected (assessment based on ingredients).

**Respiratory or Skin Sensitization**  
**Product:** No effects expected (assessment based on ingredients).

**Carcinogenicity**  
**Product:** No effects expected (assessment based on ingredients).

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Quartz (SiO<sub>2</sub>) Overall evaluation: Carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

Quartz (SiO<sub>2</sub>) Known carcinogen.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No effects expected (assessment based on ingredients).

**In vivo**

**Product:** No effects expected (assessment based on ingredients).

**Reproductive toxicity**

**Product:** No effects expected (assessment based on ingredients).

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No effects expected (assessment based on ingredients).

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No effects expected (assessment based on ingredients).

**Aspiration Hazard**

**Product:** No effects expected (assessment based on ingredients).

**Other effects:** None known.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No effects expected (assessment based on ingredients).

**Aquatic Invertebrates**

**Product:** No effects expected (assessment based on ingredients).

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No effects expected (assessment based on ingredients).

**Aquatic Invertebrates**

**Product:** No effects expected (assessment based on ingredients).

**Toxicity to Aquatic Plants**

**Product:** No effects expected (assessment based on ingredients).

**Persistence and Degradability**

**Biodegradation**  
Product: Not applicable.

**BOD/COD Ratio**  
Product: No data available.

**Bioaccumulative potential**  
**Bioconcentration Factor (BCF)**  
Product: No data available.

**Partition Coefficient n-octanol / water (log Kow)**  
Product: No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** None known.

### 13. Disposal considerations

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Waste of this material should not be mixed with other waste. Provide measures such as vented bungs to ensure pressure relief in the waste container.

### 14. Transport information

This material is not subject to transport regulations.

**Environmental hazards:** Not regulated.

**Special precautions for user:** Packaging with a breathing/venting bung are FORBIDDEN for transport by air.

### 15. Regulatory information

#### US Federal Regulations

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**  
None present or none present in regulated quantities.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### Hazard categories

Acute (Immediate)  Chronic (Delayed)  Fire  Reactive  Pressure Generating

##### SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.



**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Quartz (SiO<sub>2</sub>)                      Carcinogenic.

**US. New Jersey Worker and Community Right-to-Know Act**

**Chemical Identity**

Quartz (SiO<sub>2</sub>)

**US. Massachusetts RTK - Substance List**

**Chemical Identity**

Quartz (SiO<sub>2</sub>)

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

Quartz (SiO<sub>2</sub>)

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**Inventory Status:**

Australia AICS: On or in compliance with the inventory.

Canada DSL Inventory List: On or in compliance with the inventory.

EINECS, ELINCS or NLP: On or in compliance with the inventory.

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory.

Philippines PICCS: On or in compliance with the inventory.

US TSCA Inventory: On or in compliance with the inventory.

New Zealand Inventory of Chemicals: On or in compliance with the inventory.

**16. Other information, including date of preparation or last revision**

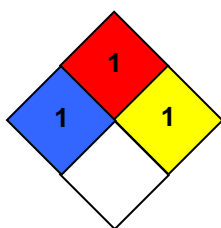
**HMIS Hazard ID**

<b>Health</b>		1
<b>Flammability</b>		1
<b>Physical Hazards</b>		1
<b>PERSONAL PROTECTION</b>		<b>B</b>

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**NFPA Hazard ID**



Flammability  
 Health  
 Reactivity  
 Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 10/20/2017

**Revision Date:** No data available.

**Version #:** 2.0

**Further Information:** No data available.

**Disclaimer:**

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.