Sakrete Paver Set Polymeric Sand; Sakrete PermaSand Polymer Jointing Sand
Safety Data Sheet
Date of issue: 02/14/2014 Revision date: 01/31/2018 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form : Mixture
Product name : Sakrete Paver Set Polymeric Sand
Sakrete PermaSand Polymer Jointing Sand

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : Various.

1.3. Details of the supplier of the safety data sheet
Sakrete of North America
625 Griffith Rd., Ste 100
28217 Charlotte, NC - USA
T 866-725-7383

1.4. Emergency telephone number
Emergency number CHEMTREC
1-800-424-9300 [USA] / +1 703-527-3887 [CAN]

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Acute toxicity 4 (Oral)
Serious Eye irritation 2A
Skin Sensitization 1
Carcinogenicity 1A
Specific Target Organ Toxicity After Repeated Exposure 1

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US) : 

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : Harmful if swallowed. Causes serious eye irritation. May cause an allergic skin reaction. May cause cancer. Causes damage to lungs through prolonged or repeated exposure.
Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin: Wash with plenty water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other hazards
Other hazards not contributing to the classification : Not applicable.

2.4. Unknown acute toxicity (GHS-US)
Sakrete Paver Set Polymeric Sand: 4% of the mixture consists of ingredient(s) of unknown acute toxicity.
Sakrete PermaSand Polymer Jointing Sand: 2% of the mixture consists of ingredient(s) of unknown acute toxicity.
SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>(CAS No) 14808-60-7</td>
<td>60 - 100</td>
<td>Acute Tox. 4 (Oral)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carc. 1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT RE 1</td>
</tr>
<tr>
<td>Cement, portland, chemicals</td>
<td>(CAS No) 65997-15-1</td>
<td>0.5 - 2</td>
<td>Skin Irrit. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3</td>
</tr>
</tbody>
</table>

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory tract irritation.

Symptoms/injuries after skin contact : May cause skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitisation by skin contact.

Symptoms/injuries after eye contact : Causes serious eye irritation. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion : Harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Treat for surrounding material.

Unsuitable extinguishing media : Not available.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Firefighting instructions : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum or sweep material and place in a disposal container.

6.3. Reference to other sections

No additional information available.
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Do not swallow. Avoid contact with skin and eyes. Good housekeeping is important to prevent accumulation of dust. Avoid generating and breathing dust. The use of compressed air for cleaning clothing, equipment, etc., is not recommended. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep out of the reach of children. Store in dust-tight, dry, labelled containers. Keep container tightly closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th></th>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>0.025 mg/m³</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>(30)/(%SiO₂ + 2) mg/m³ TWA, total dust</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(250)/(%SiO₂ + 5) mppcf TWA, respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10)/(%SiO₂ + 2) mg/m³ TWA, respirable fraction</td>
</tr>
</tbody>
</table>

Cement, portland, chemicals (65997-15-1)

<table>
<thead>
<tr>
<th></th>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
<th>1 mg/m³</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Wear suitable waterproof gloves.

Eye protection: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

Skin and body protection: Wear suitable waterproof protective clothing.

Respiratory protection: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA’s respirator standard (29 CFR 1910.134) and ANSI’s standard for respiratory protection (Z88.2).

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid.
Appearance: Powder.
Colour: Various.
Odour: Characteristic.
Odour threshold: No data available.
P: 12 – 13
Relative evaporation rate (butylacetate=1): No data available.
Melting point: No data available.
Freezing point: No data available.
Boiling point: No data available.
Flash point: No data available.
Self ignition temperature: No data available.
Decomposition temperature: No data available.
Flammability (solid, gas): Not flammable.
Vapour pressure: No data available.
**Sakrete Paver Set Polymeric Sand; Sakrete PermaSand PolymerJointing Sand**

**Safety Data Sheet**


<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available.</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available.</td>
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<tr>
<td>Explosive limits</td>
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<tr>
<td>VOC content</td>
<td>0%, Not applicable; 0 wt, Not applicable.</td>
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</table>

**SECTION 10: Stability and reactivity**

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. Keep dry in storage.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Incompatible materials. Moisture.

10.5. Incompatible materials

Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Acute toxicity: Harmful if swallowed.

**Sakrete Paver Set Polymeric Sand; Sakrete PermaSand PolymerJointing Sand**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>510 - 525 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>No data available.</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**Quartz (14808-60-7)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>500 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: May cause an allergic skin reaction.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: May cause cancer.

**Quartz (14808-60-7)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>1</td>
</tr>
<tr>
<td>National Toxicity Program (NTP) Status</td>
<td>2</td>
</tr>
</tbody>
</table>

Reproductive toxicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Causes damage to lungs through prolonged or repeated exposure. (Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.)
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Aspiration hazard
Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation
May cause respiratory tract irritation.

Symptoms/injuries after skin contact
May cause skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitisation by skin contact.

Symptoms/injuries after eye contact
Causes serious eye irritation. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion
Harmful if swallowed. May cause stomach distress, nausea or vomiting.

Other information
Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general
No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems and treatment plants is not considered environmentally harmful.

12.2. Persistence and degradability
Sakrete Paver Set Polymeric Sand; Sakrete PermaSand PolymerJointing Sand
Persistence and degradability
No data available.

12.3. Bioaccumulative potential
Sakrete Paver Set Polymeric Sand; Sakrete PermaSand PolymerJointing Sand
Bioaccumulative potential
No data available.

12.4. Mobility in soil
Sakrete Paver Set Polymeric Sand; Sakrete PermaSand PolymerJointing Sand
Ecology - soil
No data available.

12.5. Other adverse effects
Other adverse effects
No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations
This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number
Not applicable

14.2. UN proper shipping name
Not applicable

14.3. Additional information
Other information
No supplementary information available.

Special transport precautions
Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

Quartz (14808-60-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cement, portland, chemicals (65997-15-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

Sakrete Paver Set Polymeric Sand; Sakrete PermaSand PolymerJointing Sand
State or local regulations
This product contains Crystalline Silica, Quartz and may also contain other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

<table>
<thead>
<tr>
<th>IARC (I)</th>
<th>International Agency for Research on Cancer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Carcinogenic to humans;</td>
<td></td>
</tr>
<tr>
<td>2A - Probably carcinogenic to humans;</td>
<td></td>
</tr>
<tr>
<td>2B - Possibly carcinogenic to humans;</td>
<td></td>
</tr>
<tr>
<td>3 - Not classifiable;</td>
<td></td>
</tr>
<tr>
<td>4 - Probably not carcinogenic to humans.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (N)</th>
<th>National Toxicology Program.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Evidence of Carcinogenicity;</td>
<td></td>
</tr>
<tr>
<td>2 - Known Human Carcinogens;</td>
<td></td>
</tr>
<tr>
<td>3 - Reasonably anticipated to be Human Carcinogen;</td>
<td></td>
</tr>
<tr>
<td>4 - Substances delisted from report on Carcinogens;</td>
<td></td>
</tr>
<tr>
<td>5 - Twelfth Report - Items under consideration.</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Indication of changes  :  None.
Other information     :  None.

NFPA health hazard    :  2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard      :  0 - Materials that will not burn.
NFPA reactivity       :  0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.