SAFETY DATA SHEET

1. Identification

Product identifier: USG Structural Panels

Other means of identification:
- SDS number: 14000030002UB
- Synonyms: Cement board

Recommended use: For interior and exterior applications. Use in accordance with manufacturer's recommendations.

Recommended restrictions:

Manufactured by:
- Company name: United States Gypsum Company
- Address: 550 West Adams Street, Chicago, Illinois 60661-3637
- Telephone: 1-800-874-4968
- Website: www.usg.com
- Emergency phone number: 1-800-507-8899

2. Hazard(s) identification

Not classified.

Physical hazards:

Health hazards:
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 1
- Sensitization, skin: Category 1
- Carcinogenicity: Category 1A

OSHA defined hazards: Not classified.

Label elements:

Signal word: Danger

Hazard statement: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause cancer.

Precautionary statement:

Prevention:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response:
If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If exposed or concerned: Call a poison center/doctor.

Storage:
Store locked up.

Disposal:
Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: Not applicable.

3. Composition/information on ingredients

Mixtures
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)</td>
<td>26499-65-0</td>
<td>&gt;35</td>
</tr>
<tr>
<td>Portland Cement</td>
<td>65997-15-1</td>
<td>&lt;20</td>
</tr>
<tr>
<td>Continuous filament glass fiber</td>
<td>65997-17-3</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Silica, fume</td>
<td>69012-64-2</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Trade secret</td>
<td>Proprietary</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

**Additional components**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz)</td>
<td>14808-60-7</td>
<td>&lt;0.25</td>
</tr>
</tbody>
</table>

**Composition comments**

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.25%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

**4. First-aid measures**

**Inhalation**

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

**Skin contact**

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops and persists.

**Eye contact**

Dust in eyes: Flush with cold tap water for at least 15 minutes. If irritation persists, seek medical attention immediately.

**Ingestion**

Rinse mouth. Get medical attention if symptoms occur.

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

Dust may cause skin, eye, throat and respiratory system irritation and cause coughing.

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

Provide general supportive measures and treat symptomatically.

**General information**

Ensure that medical personnel are aware of the material(s) involved.

**5. Fire-fighting measures**

**Suitable extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**

Not applicable.

**Specific hazards arising from the chemical**

Not a fire hazard.

**Special protective equipment and precautions for firefighters**

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**

Use standard firefighting procedures and consider the hazards of other involved materials.

**Specific methods**

Cool material exposed to heat with water spray and remove it if no risk is involved.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**

No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

**Environmental precautions**

Avoid discharge to drains, sewers, and other water systems.
7. Handling and storage

**Precautions for safe handling**

Use work methods which minimize dust production. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Structural panels weigh between 140 to 150 pounds per panel and are designed to be carried and installed by two people. Because of the weight of these panels, it is important that they are always laid flat on the floor or flat over the framing, in a horizontal position. Prior to installation on the floor framing, panels may be placed on pallets or timbers. Panels may be placed on pallets or timbers spaced a maximum of 4' on center with the end supports within 1' of the ends of the panel.

Structural panels are cement based and are reinforced with glass fiber. Wear protective gloves to prevent any irritation to hands from the cement or glass fiber.

Cut panels with a carbide tipped circular saw equipped with a dry dust collection device or a dust wetting device to limit the amount of airborne dust. Dispose of the collected dust in a safe manner in compliance with local codes and regulations. When cutting panels always wear a NIOSH approved dust mask and wear safety glasses.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Protect from weather and prevent exposure to sustained moisture.

Panels must never be stored in an upright position, on their edges, leaning against a wall or other vertical support. If these panels tip over they could cause serious injury or death.

When placing pallets of material on a floor or floor frame it is imperative that the pallet be located over load bearing walls and framing that are capable of supporting the total load of a 20 piece pallet, which range between 3000 to 3100 pounds. Consult a qualified structural engineer or design professional, as required, for safe and proper distribution of pallets of panels over a floor frame and/or floor structure.

8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Portland Cement (CAS 65997-15-1)</td>
<td>PEL</td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement (CAS 65997-15-1)</td>
<td>TWA</td>
<td>50 mppcf</td>
</tr>
<tr>
<td>Silica, fume (CAS 69012-64-2)</td>
<td>TWA</td>
<td>0.8 mg/m3</td>
</tr>
</tbody>
</table>

**Additional components**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.3 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m3</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous filament glass fiber (CAS 65997-17-3)</td>
<td>TWA</td>
<td>1 fibers/cm3</td>
<td>Respirable fibers (length &gt; 5 µm &amp; aspect ratio ≥ 3:1)</td>
</tr>
<tr>
<td>Portland Cement (CAS 65997-15-1)</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>
### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Additional components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

### US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous filament glass fiber (CAS 65997-17-3)</td>
<td>TWA</td>
<td>3 fibers/cm³</td>
<td>Respirable fibers (≤ 3.5 µm in diameter &amp; ≥ 10 µm in length)</td>
</tr>
<tr>
<td>Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fiber, total</td>
</tr>
<tr>
<td>Portland Cement (CAS 65997-15-1)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total</td>
</tr>
<tr>
<td>Silica, fume (CAS 69012-64-2)</td>
<td>TWA</td>
<td>6 mg/m³</td>
<td>Total</td>
</tr>
<tr>
<td>Trade secret (CAS Proprietary)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable</td>
</tr>
<tr>
<td>Additional components</td>
<td>Type</td>
<td>Value</td>
<td>Form</td>
</tr>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>

### Biological limit values
- No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls
- Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

### Individual protection measures, such as personal protective equipment
- **Eye/face protection**: Wear approved safety goggles.
- **Skin protection**
  - **Hand protection**: Wear appropriate chemical resistant gloves.
  - **Other**: Wear long-sleeved shirts, pants and rubber boots.
- **Respiratory protection**
  - If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

### Thermal hazards
- None.

### General hygiene considerations
- 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. Observe any medical surveillance requirements.

### 9. Physical and chemical properties

#### Appearance
- **Physical state**: Solid.
- **Form**: Board.
- **Color**: Gray or red.
- **Odor**: Low to no odor.
- **Odor threshold**: Not applicable.
- **pH**: 10 - 12
- **Melting point/freezing point**: Not applicable.
- **Initial boiling point and boiling range**: Not applicable.
Flash point                                 Not applicable.
Evaporation rate                           Not applicable.
Flammability (solid, gas)                  Not applicable.
Upper/lower flammability or explosive limits
  Flammability limit - lower (%)            Not applicable.
  Flammability limit - upper (%)            Not applicable.
  Explosive limit - lower (%)               Not applicable.
  Explosive limit - upper (%)               Not applicable.
Vapor pressure                             Not applicable.
Vapor density                              Not applicable.
Relative density                          1.2 - 1.4 (H20 = 1)
Solubility(ies)
  Solubility (water)                       Insoluble in water.
Partition coefficient (n-octanol/water)    Not applicable.
Auto-ignition temperature                  Not applicable.
Decomposition temperature                  Not applicable.
Viscosity                                   Not applicable.
Other information                          Not applicable.
  Bulk density                             72 - 88 lb/ft3
  Flammability                             Not applicable.
  VOC (Weight %)                           0 g/l

10. Stability and reactivity
Reactivity                                   The product is stable and non reactive under normal conditions of storage and transport.
Chemical stability                          Material is stable under normal conditions.
Possibility of hazardous reactions          Hazardous polymerization does not occur.
Conditions to avoid                          Contact with incompatible materials.
Incompatible materials                      Strong oxidizing agents.
Hazardous decomposition products            Calcium oxides. Sulfur oxides.

11. Toxicological information
Information on likely routes of exposure
  Inhalation                                 Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
  Skin contact                               Dust can be irritating to skin.
  Eye contact                                Causes serious eye damage.
  Ingestion                                  Ingestion may cause irritation and stomach discomfort.
Symptoms related to the physical, chemical and toxicological characteristics
  Dust may cause skin, eye, throat and respiratory system irritation and cause coughing.

Information on toxicological effects
Acute toxicity                               Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation                   Dust can cause skin irritation.
Serious eye damage/eye irritation            Causes serious eye damage.
Respiratory or skin sensitization
  Respiratory sensitization                  Not a respiratory sensitizer.
  Skin sensitization                        May cause an allergic skin reaction.
Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.
Silica, fume (CAS 69012-64-2) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Not classified. For detailed information, see section 16.

Aspiration hazard

Due to the physical form of the product it is not an aspiration hazard.

Chronic effects

Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. May cause eczema-like skin disorders (dermatitis).

12. Ecological information

Ecotoxicity

No ecotoxicity data noted for the ingredient(s).

Persistence and degradability

No data available.

Bioaccumulative potential

Bioaccumulation is not expected.

Mobility in soil

No data available.

Other adverse effects

None expected.

13. Disposal considerations

Disposal instructions

Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations

Dispose of in accordance with local regulations.

Hazardous waste code

Not regulated.

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. Massachusetts RTK - Substance List
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Silica, fume (CAS 69012-64-2)
Trade secret (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Trade secret (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Silica, fume (CAS 69012-64-2)
Trade secret (CAS Proprietary)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
WARNING: This product contains chemicals known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date 06-April-2017
Revision date 05-June-2015
Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings: 2
Health:
  Flammability: 0
  Physical hazard: 0

Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.