1. Identification

Product identifier: USG® Glacier™ Basic Acoustical Ceiling Panels

Other means of identification:
- SDS number: 41281160001
- Additional Products: Arctic, Cheyenne™, Frost™ Basic, Frost™, Frost™ High LR, Frost™ Basic Foil-Back, "F"
- Synonyms: Fissured™ Basic, Frost™ High NRC/High CAC, Sandrift™, Renditions
- Additional Products: Cast Mineral Fiber Ceiling Panels/Tiles

Recommended use: Interior use.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
- 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

Physical hazards: Not classified.

Health hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:
- Hazard symbol: None.
- Signal word: None.
- Hazard statement: None.

Precautionary statement:
- Prevention: Observe good industrial hygiene practices.
- Response: Get medical attention/advice if you feel unwell.
- Storage: Store as indicated in Section 7.
- 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>Slag wool fiber</td>
<td>N/A</td>
<td>&gt; 65</td>
</tr>
<tr>
<td>Calcium sulfate hemihydrate</td>
<td>26499-65-0</td>
<td>&lt; 15</td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt; 0.25</td>
</tr>
</tbody>
</table>


All concentrations are in percent by weight.

Raw materials and/or coatings in this product contain small amounts of titanium dioxide, which has been classified as possibly carcinogenic to humans by the International Agency for Research on Cancer (IARC). However, per IARC "no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints" (1). See Section 16 for further information.

4. First-aid measures

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.

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

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Rinse mouth. Get medical attention if symptoms occur.

Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.

Provide general supportive measures and treat symptomatically.

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

5. Fire-fighting measures

Use fire-extinguishing media appropriate for surrounding materials.

Not applicable.

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.

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

No unusual fire or explosion hazards noted.

6. Accidental release measures

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

Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>U.S. - OSHA Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slag wool fiber</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Fiber, respirable (diameter ≤ 3.5 µm and length ≥ 10 µm)</td>
</tr>
<tr>
<td>U.S. - OSHA Components</td>
<td>Type</td>
<td>Value</td>
<td>Form</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components</td>
<td></td>
<td>15 mg/m³</td>
<td>Fiber, total</td>
</tr>
<tr>
<td>Calcium sulfate hemihydrate (CAS 26499-65-0)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Kaolin (CAS 1332-58-7)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Limestone (CAS 1317-65-3)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. OSHA Table Z-3 (29 CFR 1910.1000) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin (CAS 1332-58-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>15 mg/m³</td>
<td>Total dust.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 mppcf</td>
<td>Total dust.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 mppcf</td>
<td>Respirable fraction.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate hemihydrate (CAS 26499-65-0)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Kaolin (CAS 1332-58-7)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Slag wool fiber</td>
<td>TWA</td>
<td>1 fibers/cm³</td>
<td>Fiber, respirable (length &gt; 5 µm and aspect ratio ≥ 3:1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate hemihydrate (CAS 26499-65-0)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td>Kaolin (CAS 1332-58-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total</td>
</tr>
<tr>
<td>5 mg/m³</td>
<td>Respirable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 mg/m³</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone (CAS 1317-65-3)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td>10 mg/m³</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slag wool fiber</td>
<td>TWA</td>
<td>3 fibers/cm³</td>
<td>Fiber, respirable (diameter ≤ 3.5 µm and length ≥ 10 µm)</td>
</tr>
<tr>
<td>3 fibers/cm³</td>
<td>Fibrous dust.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 mg/m³</td>
<td>Fiber, total</td>
<td></td>
<td></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.

Cut and trim with a utility knife or hand saw to minimize dust levels. If a router is used it must have a dust collection system. Operations such as power cutting, power kerfing or using compressed air to remove dust are not recommended (2). See Section 16 for further information.
Individual protection measures, such as personal protective equipment

Eye/face protection  
Wear approved safety goggles.

Skin protection  
Hand protection  
It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection  
Other  
Normal work clothing (long sleeved shirts and long pants) is recommended.

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.

Respiratory protection  
None.

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 separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance  
Physical state  
Solid.

Form  
Panel or tile.

Color  
Various colors.

Odor  
Low to no odor.

Odor threshold  
Not applicable.

pH  
9

Melting point/freezing point  
2200 °F (1204.44 °C) (Slag wool)

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  
0.39 - 0.49 (H2O=1)

Solubility(ies)  
Solubility (water)  
Very low solubility in water.

Partition coefficient (n-octanol/water)  
Not applicable.

Auto-ignition temperature  
Not applicable.

Decomposition temperature  
Not applicable.

Viscosity  
Not applicable.

Other information  
Bulk density  
24 - 30 lb/ft³

Explosive properties  
Not explosive.

Oxidizing properties  
Not oxidizing.
10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, 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
Acids. Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure
- **Inhalation**: Inhalation of dusts may cause respiratory irritation.
- **Skin contact**: May cause irritation through mechanical abrasion.
- **Eye contact**: Direct contact with airborne particulates may cause temporary irritation.
- **Ingestion**: Ingestion may cause irritation and stomach discomfort.

Symptoms related to the physical, chemical and toxicological characteristics
Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

**Acute toxicity**: Not expected to be a hazard under normal conditions of intended use.

**Skin corrosion/irritation**: Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**: Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**: No data available, but none expected.
- **Skin sensitization**: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- **IARC Monographs. Overall Evaluation of Carcinogenicity**: Not listed.
- **NTP Report on Carcinogens**: Not listed.

**Reproductive toxicity**: No data available.

**Specific target organ toxicity**
- **single exposure**: No data available, but none expected.
- **repeated exposure**: No data available, but none expected.

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

12. Ecological information

**Ecotoxicity**
The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium sulfate hemihydrate (CAS 26499-65-0)</td>
<td>Aquatic</td>
<td>Fish LC50 Fathead minnow (Pimephales promelas) &gt; 1970 mg/l, 96 hours</td>
</tr>
</tbody>
</table>
Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>Daphnia magna</td>
</tr>
<tr>
<td></td>
<td>&gt; 100 mg/l, 48 Hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LL50</td>
</tr>
<tr>
<td></td>
<td>Oryzias latipes</td>
</tr>
<tr>
<td></td>
<td>&gt; 100 mg/l, 96 Hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data is available on the degradability of this product.

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
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

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. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations
This product is not known to be 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.

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

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not listed.

Toxic Substances Control Act (TSCA)
All components on the TSCA 8(b) inventory are designated "active" or are exempt from reporting under the Inventory Update Rule.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

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
Calcium sulfate hemihydrate (CAS 26499-65-0)
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)

US. New Jersey Worker and Community Right-to-Know Act
Calcium sulfate hemihydrate (CAS 26499-65-0)
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)

US. Pennsylvania Worker and Community Right-to-Know Law
Calcium sulfate hemihydrate (CAS 26499-65-0)
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)

US. Rhode Island RTK
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)
Slag wool fiber (CAS N/A)

California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

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>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</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 26-November-2014
Revision date 01-November-2019
Version # 03
Slag Wool Fiber: Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted. These studies have found no significant association of non-malignant (i.e. fibrosis) or malignant (i.e., lung cancer or mesothelioma) lung disease and exposures to slag wool fibers and have not established a causal relationship between exposure and non-malignant or malignant diseases.

In 2001, the International Agency for Research on Cancer (IARC) assigned slag wool fiber to the Group 3 category ["not classifiable as to carcinogenicity to humans"]. The synthetic mineral fiber used in this product is exonerated from classification as a carcinogen in accordance with Note Q in the EU Commission Directive 97/69/EC.

Titanium dioxide: Raw materials and/or coatings in this product contain small amounts of titanium dioxide. The International Agency for Research on Cancer (IARC) has determined that titanium dioxide is possibly carcinogenic to humans (Group 2B) based on inadequate evidence in humans and sufficient evidence in experimental animals. This conclusion relates to long-term inhalation exposure to high concentrations of pigmentary (powdered) or ultrafine titanium dioxide. However, no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints. The available human studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer. The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4). The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens.

VOC Emissions: USG certifies the products listed in Section 1 of this SDS as Low-Emitting, defined as below the emissions of the concentration for each individual volatile organic chemical of concern (VOC) as specified in the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Small-Scale Environmental Chambers Version 1.1 [CDPH/EHLB/Standard Method V1.1 (February 2010); aka, chamber testing portion of CA Section 01350] and ASTM Guide D5116-06.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

References

Disclaimer
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.