1. Identification

Product identifier: Glass Mat Faced Gypsum Panels

Product list:
- DensArmor Plus® Interior Panel
- DensArmor Plus® Fireguard® Abuse-Resistant Panels
- DensArmor Plus® Fireguard® Impact-Resistant Panels
- DensArmor Plus® Fireguard® Interior Panels
- DensDeck® Prime Roof Board
- DensDeck® Roof Board
- DensDeck® Prime Fireguard® Roof Board
- DensDeck® Fireguard® Roof Board
- DensElement™ Sheathing
- DensGlass® Fireguard® Sheathing
- DensGlass® Shaftliner
- DensGlass® Sheathing
- DensShield® Fireguard® Tile Backer
- DensShield® Tile Backer

Product List B
- DensArmor Plus® Fireguard C® Interior Panels

Other means of identification

Recommended code: GP-71C

Recommended use: Products accommodate a wide range of wall, floor, ceiling and roof applications.

Recommended restrictions: Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer/Importer/Supplier/Distributor information

Company name: Georgia-Pacific Gypsum LLC
Address: 133 Peachtree Street, NE
Atlanta, GA 30303
Telephone: Technical Information 800.225.6119
(M)SDS Request 404.652.5119
E-mail: Not available.
Emergency phone number: Chemtrec - Emergency 800.424.9300

2. Hazard(s) identification

Emergency overview: This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

Physical hazards: Not classified.

Health hazards:
- Eye irritation: Category 2B

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements
- Hazard symbol: None.
- Signal word: Warning
- Hazard statement: Causes eye irritation.
- Precautionary statement: Wash thoroughly after handling. Observe good industrial hygiene practices.
Response
Wash hands after handling. 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.

Storage
Store away from acids.

Disposal
Dispose of contents/container in accordance with applicable regulations.

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

Supplemental information
None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE</td>
<td></td>
<td>10101-41-4</td>
<td>≤ 95</td>
</tr>
<tr>
<td>VERMICULITE**</td>
<td></td>
<td>1318-00-9</td>
<td>0 - 7</td>
</tr>
<tr>
<td>CONTINUOUS FILAMENT GLASS FIBER</td>
<td></td>
<td>65997-17-3</td>
<td>1 - 5</td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)*</td>
<td></td>
<td>14808-60-7</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

** Found in products in List B, Section 1 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

4. First-aid measures

Inhalation
If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

Skin contact
For skin contact, wash immediately with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion
Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.

Most important symptoms/effects, acute and delayed
Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Firefighters should wear full protective clothing including self contained breathing apparatus.

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

General fire hazards
No unusual fire or explosion hazards noted.
6. Accidental release measures

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

Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Use personal protection recommended in Section 8. Keep unnecessary personnel away.

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

Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Keep out of drains, sewers, ditches, and waterways.

7. Handling and storage

**Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

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

Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERMICULITE** (CAS 1318-00-9)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>CRYSSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)</td>
<td>PEL</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**ACGIH**

<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>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

**US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m³, non-standard units**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)</td>
<td>TWA</td>
<td>1 fibers/cm³</td>
<td>Fiber.</td>
</tr>
<tr>
<td>CRYSSTALLINE 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>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total.</td>
</tr>
</tbody>
</table>

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Material name: Glass Mat Faced Gypsum Panels

GP-71C Version #: 05 Revision date: March-24-2017 Issue date: March-13-2015 SDS US
US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
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<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Fiber, total</td>
</tr>
<tr>
<td>CRYSSTALLINE 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).

Exposure guidelines
Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

Appropriate engineering controls
Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection
Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Eye wash fountain is recommended.

Skin protection
Hand protection
Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)). Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Safety shower/eye wash fountain is recommended in the workplace area.

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).

Thermal hazards
Not applicable.

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. Keep away from food and drink.

9. Physical and chemical properties

Appearance
Gypsum boards

Physical state
Solid.

Form
Solid

Color
Facing color varies

Odor
Low odor

Odor threshold
Not available.

pH
6 - 8

Melting point/freezing point
Not applicable.

Initial boiling point and boiling range
Not applicable.

Flash point
Not applicable.

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.
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: Not available.
- Solubility(ies):
  - Solubility (water): 0.2 % @ 22°C
- Partition coefficient (n-octanol/water): Not applicable.
- Auto-ignition temperature: Not applicable.
- Decomposition temperature: Not available.
- Viscosity: Not applicable.

Other information
- Flash point class: Not flammable
- Specific gravity: 2.2 - 2.4

10. Stability and reactivity

- Reactivity: Contact with strong acids produces carbon dioxide.
- Chemical stability: Material is stable under normal conditions.
- Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
- Conditions to avoid: Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
- Incompatible materials: Strong acids.
- Hazardous decomposition products: May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological information

Information on likely routes of exposure
- Inhalation: Inhalation of dusts may cause respiratory irritation.
- Skin contact: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
- Eye contact: Dust in the eyes will cause irritation.
- Ingestion: Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics: Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Mat Faced Gypsum Panels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>1664 mg/kg estimated</td>
</tr>
</tbody>
</table>

Components

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>TEST RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
</tr>
</tbody>
</table>
Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Dust in the eyes will cause irritation.

Respiratory or skin sensitization

Respiratory sensitization
Not likely to cause respiratory sensitization.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
Not classified.

Carcinogenicity
Not expected to be hazardous by OSHA/WHMIS criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and 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 a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) 1 Carcinogenic to humans.

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

US. National Toxicology Program (NTP) Report on Carcinogens
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity
Not classified.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not classified.

Chronic effects
Not hazardous under normal conditions of use.

Further information
*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

12. Ecological information

Ecotoxicity
Not considered to be harmful to aquatic life.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish LC50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 1970 mg/l, 96 hours</td>
<td></td>
</tr>
<tr>
<td>CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish LC50</td>
<td>Fish &gt; 1000 mg/l, 96 hours</td>
<td></td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish LC50</td>
<td>Zebra danio (Danio rerio) &gt; 10000 mg/l, 96 Hours OECD SIDS</td>
<td></td>
</tr>
</tbody>
</table>

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

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerations

**Disposal instructions**
Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations**
Dispose in accordance with all applicable 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**
Not available.

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 not hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

**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.

Not regulated.

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

**Hazard categories**
- Immediate Hazard - Yes
- Delayed Hazard - No
- 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. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)

US. 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.

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>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply 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  March-13-2015
Revision date March-24-2017
Version #  05

HMIS® ratings
Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 1
Flammability: 0
Instability: 0

Disclaimer
This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

Revision information
This document has undergone significant changes and should be reviewed in its entirety.