Gold Bond® High Strength Fire-Shield® LITE®
by National Gypsum Company

CLASSIFICATION: 09 29 00.00 Finishes: Gypsum Board

PRODUCT DESCRIPTION: Gold Bond® BRAND High Strength Fire-Shield® LITE® Gypsum Board panels consist of a fire-resistant Type X gypsum core specially formulated to be 15% lighter than standard Type X gypsum board. High Strength Fire-Shield LITE is encased in heavy natural-finish, 100% recycled paper on the face and back sides. The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. For speed of installation, GridMarX® guide marks are printed on the paper surface. This HPD covers 5/8” Gold Bond® BRAND High Strength Fire-Shield® LITE® Gypsum Board products.

Section 1: Summary

CONTENT INVENTORY

Inventory Reporting Format
- Nested Materials Method
- Basic Method

Threshold Disclosed Per
- Material
- Product

Threshold level
- 100 ppm
- 1,000 ppm
- Per GHS SDS
- Per OSHA MSDS
- Other

Residuals/Impurities
- Residuals/Impurities
- Considered in 2 of 2 Materials

Are All Substances Above the Threshold Indicated:
- Characterized: Yes No
- Percent Weight and Role Provided?
- Screened: Yes No
- Using Priority Hazard Lists with Results Disclosed?
- Identified: Yes No
- Name and Identifier Provided?

CONTENT IN DESCENDING ORDER OF QUANTITY
Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY | GREENSCREEN SCORE | HAZARD TYPE
--- | --- | --- | --- | ---
HIGH STRENGTH FIRE-SHIELD® LITE® GYPSUM CORE | GYPSUM | LT-UNK | VERMICULITE NoGS | ACID MODIFIED, CORN STARCH NoGS | SOLID GLASS AND GLASS / MINERAL FIBER (SEE VARIANTS) LT-UNK | CAN QUARTZ LT-1 | CAN | HIGH STRENGTH FIRE-SHIELD® LITE® PAPER FACING | MIXED RECYCLED PAPER NoGS | 2,5-FURANDIONE, DIHYDRO-, MONO-C15-20-ALKENYL DERIVS. LT-UNK | STARCH LT-UNK

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:
This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight. Therefore, this HPD qualifies for the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1). Substances not "Identified" are those without a registered identifier.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE
- VOC emissions: UL/GreenGuard Certified
- VOC emissions: UL/GreenGuard Gold Certified
- Multi-attribute: Type III Environmental Product Declaration (EPD)
- Other: ILFI Declare - LBC Compliant

CONSISTENCY WITH OTHER PROGRAMS
Pre-checked for LEED v4 Material Ingredients, Option 1

PREPARER: Elixir Environmental
VERIFIER:
VERIFICATION #: 0
SCREENING DATE: 2018-08-06
PUBLISHED DATE: 2018-08-06
EXPIRY DATE: 2021-08-06
This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- **Basic Inventory method with Product-level threshold.**
- **Nested Material Inventory method with Product-level threshold**
- **Nested Material Inventory method with individual Material-level thresholds**

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: [www.hpd-collaborative.org/hpd-2-1-standard](http://www.hpd-collaborative.org/hpd-2-1-standard)

<table>
<thead>
<tr>
<th>Material</th>
<th>ID</th>
<th>%:</th>
<th>GS</th>
<th>RC</th>
<th>NANO</th>
<th>Role</th>
<th>HAZARDS</th>
<th>AGENCY(IES) WITH WARNINGS</th>
<th>RESIDUALS AND IMPURITIES NOTES</th>
<th>SUBSTANCE NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH STRENGTH FIRE-SHIELD® LITE® GYPSUM CORE</strong> %: 95.2000 - 96.0000</td>
<td></td>
<td></td>
<td>LT-UNK</td>
<td>PreC</td>
<td>No</td>
<td>Core Substrate</td>
<td>None Found</td>
<td>No warnings found on HPD Priority lists</td>
<td>Residuals or impurities with the potential to be present at or above the Content Inventory Threshold indicated that return a GS score of BM-1, LT-1, LT-P1 or NoGS have been disclosed, based on batch testing, supplier SDS, and as predicted by process chemistry (Pharos CML).</td>
<td>May also include CASRN 10101-41-4 (LT-UNK; No warnings found on HPD Priority lists). Four National Gypsum plants produce gypsum board exclusively with Pre-Consumer (Post-Industrial) byproduct gypsum [Shippingport, PA; Mt. Holly, NC; Westwego, LA; Shoals, IN]. Eleven National Gypsum plants produce gypsum board exclusively with natural rock gypsum [Burlington, NJ; Fort Dodge, IA; Long Beach, CA; Medicine Lodge, KS; National City, MI; Phoenix, AZ; Portsmouth, NH; Richmond, CA; Rotan, TX; Savannah, GA; Waukegan, IL]. Two National Gypsum plants produce gypsum board with a blend of Pre-Consumer (Post-Industrial) byproduct gypsum and natural rock gypsum [Apollo Beach, FL; Baltimore, MD].</td>
</tr>
<tr>
<td><strong>GYPSUM</strong></td>
<td>13397-24-5</td>
<td>%: 93.1000 - 93.6000</td>
<td>LT-UNK</td>
<td>PreC</td>
<td>No</td>
<td></td>
<td>None Found</td>
<td>No warnings found on HPD Priority lists</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VERMICULITE</strong></td>
<td>1318-00-9</td>
<td>%: 5.0000 - 5.5000</td>
<td>NoGS</td>
<td>None</td>
<td>No</td>
<td>Improves Fire Resistance</td>
<td>None Found</td>
<td>No warnings found on HPD Priority lists</td>
<td>Supplier confirms no asbestos detected (EPA method EPA/600/R-93/116).</td>
<td></td>
</tr>
<tr>
<td><strong>ACID MODIFIED, CORN STARCH</strong></td>
<td>65996-63-6</td>
<td>%: 0.6000 - 0.7000</td>
<td>NoGS</td>
<td>None</td>
<td>No</td>
<td>Improves Binding and Core Strength</td>
<td>None Found</td>
<td>No warnings found on HPD Priority lists</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SOLID GLASS AND GLASS / MINERAL FIBER (SEE VARIANTS)

**ID:** 65997-17-3

**%:** 0.6000 - 0.7000

**GS:** LT-UNK

**RC:** None

**NANO:** No

**ROLE:** Improves Core Strength

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

**SUBSTANCE NOTES:** Identified on the US EPA Safer Chemical Ingredient List.

QUARTZ

**ID:** 14808-60-7

**%:** Impurity/Residual

**GS:** LT-1

**RC:** None

**NANO:** No

**ROLE:** Impurity/Residual

**HAZARDS:**

**AGENCY(IES) WITH WARNINGS:**

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

CANCER

US NIH - Report on Carcinogens

Known to be Human Carcinogen (respirable size - occupational setting)

CANCER

MAK

Carcinogen Group 1 - Substances that cause cancer in man

CANCER

IARC

Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources

CANCER

New Zealand - GHS

6.7A - Known or presumed human carcinogens

CANCER

Japan - GHS

Carcinogenicity - Category 1A

CANCER

Australia - GHS

H350 - May cause cancer

CANCER

Australia - GHS

H350i - May cause cancer by inhalation

**SUBSTANCE NOTES:** Quartz is one of several compounds with warnings restricted to respirable forms (Pharos CML). Exposures to respirable crystalline silica are not expected during the recommended use of this product. Awaiting full GreenScreen Assessment for form specific hazards for this compound (http://ow.ly/Z5ken). Although batch testing reveals that Quartz/Silica is present in this material below the Content Inventory Threshold indicated, we have chosen to include this substance as a potential impurity to account for any possible differences between batches.

HIGH STRENGTH FIRE-SHIELD® LITE® PAPER FACING

**%:** 4.0000 - 4.8000

**HPD URL:**

**MATERIAL THRESHOLD:** 1000 ppm

**RESIDUALS AND IMPURITIES CONSIDERED:** Yes

**RESIDUALS AND IMPURITIES NOTES:** No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1, LT-P1 or NoGS based on supplier SDS and as predicted by process chemistry (Pharos CML).
### MIXED RECYCLED PAPER

<table>
<thead>
<tr>
<th>%: 99.0000 - 99.5000</th>
<th>GS: NoGS</th>
<th>RC: PostC</th>
<th>NANO: No</th>
<th>ROLE: Face and Back Paper; Holds Core</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found

**SUBSTANCE NOTES:** 100% of our gypsum board face and back paper is produced with post-consumer recyclable content. The company’s three paper mills produce paper from discarded cardboard and magazines.

### 2,5-FURANDIONE, DIHYDRO-, MONO-C15-20-ALKENYL DERIVS.

<table>
<thead>
<tr>
<th>%: 0.3000 - 0.4000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Sizing Aid</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found

**SUBSTANCE NOTES:** Alkenyl Succinic Anhydride

### STARCH

<table>
<thead>
<tr>
<th>%: 0.3000 - 0.4000</th>
<th>GS: LT-UNK</th>
<th>RC: None</th>
<th>NANO: No</th>
<th>ROLE: Binder</th>
</tr>
</thead>
</table>

**HAZARDS:**

None Found

**SUBSTANCE NOTES:** Identified on the US EPA Safer Chemical Ingredient List.
Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

<table>
<thead>
<tr>
<th>VOC EMISSIONS</th>
<th>UL/GreenGuard Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERTIFYING PARTY:</td>
<td>Third Party</td>
</tr>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>Apollo Beach, FL, USA; Burlington, NJ, USA; Fort Dodge, IA, USA; Mt. Holly, NC, USA; Phoenix, AZ, USA; Portsmouth, NH, USA; Richmond, CA, USA; Rotan, TX, USA; Shippingport, PA, USA; Shoals, IN, USA</td>
</tr>
<tr>
<td>CERTIFICATE URL:</td>
<td><a href="http://certificates.ulenvironment.com/default.aspx?id=20455&amp;t=gg">http://certificates.ulenvironment.com/default.aspx?id=20455&amp;t=gg</a></td>
</tr>
<tr>
<td>ISSUE DATE:</td>
<td>2008-12-31</td>
</tr>
<tr>
<td>EXPIRY DATE:</td>
<td>2018-12-28</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>UL Environment</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 20455-410. UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Building materials are determined compliant in accordance with an Office environment with an air change of 0.68 hr\(^{-1}\) and a loading of 11.10 m\(^2\). Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.

<table>
<thead>
<tr>
<th>VOC EMISSIONS</th>
<th>UL/GreenGuard Gold Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>CERTIFYING PARTY:</td>
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<tr>
<td>APPLICABLE FACILITIES:</td>
<td>Apollo Beach, FL, USA; Burlington, NJ, USA; Fort Dodge, IA, USA; Mt. Holly, NC, USA; Phoenix, AZ, USA; Portsmouth, NH, USA; Richmond, CA, USA; Rotan, TX, USA; Shippingport, PA, USA; Shoals, IN, USA</td>
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<td>UL Environment</td>
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</table>


<table>
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<tr>
<th>MULTI-ATTRIBUTE</th>
<th>Type III Environmental Product Declaration (EPD)</th>
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<tr>
<td>CERTIFYING PARTY:</td>
<td>Third Party</td>
</tr>
<tr>
<td>APPLICABLE FACILITIES:</td>
<td>All</td>
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<tr>
<td>ISSUE DATE:</td>
<td>2014-05-01</td>
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<tr>
<td>EXPIRY DATE:</td>
<td>2019-05-31</td>
</tr>
<tr>
<td>CERTIFIER OR LAB:</td>
<td>FPInnovations</td>
</tr>
</tbody>
</table>

CERTIFICATION AND COMPLIANCE NOTES: Type III environmental product declaration (EPD) developed according to ISO 14025 and 21930 for average 5/8” type X gypsum boards, also known as drywall, manufactured by the members of the Gypsum Association (Industry-Wide EPD). Declaration number: FPI/GA/01/2014. Scope: Cradle-to-gate. Declared unit: 1,000 square feet (1 MSF) of 5/8” type X gypsum board at facility gate.
OTHER

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: Apollo Beach, FL, USA; Burlington, NJ, USA; Fort Dodge, IA, USA; Mt. Holly, NC, USA; Phoenix, AZ, USA; Portsmouth, NH, USA; Richmond, CA, USA; Rotan, TX, USA; Shippingport, PA, USA; Shoals, IN, USA
CERTIFICATE URL: https://access.living-future.org/gold-bond%C2%AE-high-strength-fire-shield%C2%AE-lite%C2%AE


Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

**PROFORM® PAPER JOINT TAPE**
HPD URL: http://designcenter.nationalgypsum.com/sustainability/category/health-product-declaration-hpd

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Finish gypsum board with either paper tape, such as ProForm® Paper Joint Tape, and ready mix joint compound; or fiberglass mesh or paper tape and setting compound.

**PROFORM® READY MIX JOINT COMPOUNDS**
HPD URL: http://designcenter.nationalgypsum.com/sustainability/category/health-product-declaration-hpd

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Finish gypsum board with either paper tape and ready mix joint compound, such as ProForm® Ready Mix Joint Compounds; or fiberglass mesh or paper tape and setting compound.

**PROFORM® SETTING TYPE JOINT COMPOUNDS**
HPD URL: http://designcenter.nationalgypsum.com/sustainability/category/health-product-declaration-hpd

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:
Finish gypsum board with either paper tape and ready mix joint compound; or fiberglass mesh or paper tape and setting compound, such as ProForm® Setting Type Joint Compound.

Section 5: General Notes

Residuals and Impurities have been considered as stated in the Material Notes for each disclosed material.
### MANUFACTURER INFORMATION

**MANUFACTURER:** National Gypsum Company  
**ADDRESS:** 2001 Rexford Road  
Charlotte NC 28211, USA  
**WEBSITE:** www.NationalGypsum.com

**CONTACT NAME:** Amy Hockett  
**TITLE:** National Marketing Manager - Construction Design Services & Sustainability  
**PHONE:** 704-365-7931  
**EMAIL:** AmyH@NationalGypsum.com

### KEY

**OSHA MSDS** Occupational Safety and Health Administration Material Safety Data Sheet  
**GHS SDS** Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

**Hazard Types**
- AQU Aquatic toxicity  
- CAN Cancer  
- DEV Developmental toxicity  
- END Endocrine activity  
- EYE Eye irritation/corrosivity  
- GEN Gene mutation  
- GLO Global warming  
- MAM Mammalian/systemic/organ toxicity  
- MUL Multiple hazards  
- NEU Neurotoxicity  
- OZO Ozone depletion  
- PBT Persistent Bioaccumulative Toxic  
- PHY Physical Hazard (reactive)  
- REP Reproductive toxicity  
- RES Respiratory sensitization  
- SKI Skin sensitization/irritation/corrosivity  
- LAN Land Toxicity  
- NF Not found on Priority Hazard Lists

**GreenScreen (GS)**
- BM-4 Benchmark 4 (prefer-safer chemical)  
- BM-3 Benchmark 3 (use but still opportunity for improvement)  
- BM-2 Benchmark 2 (use but search for safer substitutes)  
- BM-1 Benchmark 1 (avoid - chemical of high concern)  
- BM-U Benchmark Unspecified (insufficient data to benchmark)  
- LT-P1 List Translator Possible Benchmark 1  
- LT-1 List Translator Likely Benchmark 1  
- LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)  
- NoGS Unknown (no data on List Translator Lists)

**Recycled Types**
- PreC Preconsumer (Post-Industrial)  
- PostC Postconsumer  
- Both Both Preconsumer and Postconsumer  
- Unk Inclusion of recycled content is unknown  
- None Does not include recycled content

**Other Terms**

**Inventory Methods:**
- Nested Method / Material Threshold Substances listed within each material per threshold indicated per material  
- Nested Method / Product Threshold Substances listed within each material per threshold indicated per product  
- Basic Method / Product Threshold Substances listed individually per threshold indicated per product

**Nano**
- Composed of nano scale particles or nanotechnology

**Third Party Verified**  
- Verification by independent certifier approved by HPDC  
- Preparer Third party preparer, if not self-prepared by manufacturer

**Applicable facilities**
- Manufacturing sites to which testing applies

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The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,  
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.