

# Gold Bond® Fire-Shield® Shaftliner Gypsum Boards by National Gypsum Company

# Health Product Declaration v2.1

CLASSIFICATION: 09 29 00 Finishes: Gypsum Board

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Gold Bond® Fire-Shield® Shaftliner panels consist of a fire-resistant Type X gypsum core encased in a heavy moisture-resistant, 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. Long edges of panels are beveled for ease of installation. Shaftliner panels are designed to be used in construction of lightweight fire barriers for cavity shaftwalls (1-4 hr), stairwells and area separation fire walls in multifamily housing. The panels are key components in the I-Stud, C-T Stud and C-H Stud Cavity Shaftwall Systems and the H-Stud Area Separation Fire Wall Systems. This HPD covers 1" Gold Bond® Fire-Shield® Shaftliner gypsum boards.

## Section 1: Summary

## Nested Method / Material Threshold

### 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

Explanation(s) provided for Residuals/Impurities?

- Yes
- No

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**

FIRE-SHIELD® TYPE X CORE [ GYPSUM **LT-UNK** ACID MODIFIED, CORN STARCH **NoGS** SOLID GLASS AND GLASS / MINERAL FIBER (SEE VARIANTS) **LT-UNK** | CAN SODIUM POLYNAPHTHALENESULFONATE **LT-P1** | PBT ] FIRE-SHIELD® SHAFTLINER PAPER FACING [ MIXED RECYCLED PAPER (MIXED RECYCLED PAPER) **NoGS** STARCH **LT-UNK** 2,5-FURANDIONE, DIHYDRO-, MONO-C15-20-ALKENYL DERIVS. **LT-UNK** ]

Number of Greenscreen BM-4/BM3 contents..... 0  
Contents highest concern GreenScreen  
Benchmark or List translator Score..... LT-P1  
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 is consistent with the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1).

### VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

### CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: GREENGUARD Gold Certified  
VOC emissions: GREENGUARD Certified  
Other: UL Evaluation Report (UL ER R3501-02)

### CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

Yes

No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2017-08-09

PUBLISHED DATE: 2017-08-09

EXPIRY DATE: 2020-08-09

## Section 2: Content in Descending Order of Quantity

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)

### FIRE-SHIELD® TYPE X CORE

%: 97.0000 - 98.0000

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 or LT-P1 based on batch testing, supplier SDS, and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES:

#### GYP SUM

ID: 13397-24-5

%: 98.0000 - 99.0000

GS: LT-UNK

RC: PreC

NANO: No

ROLE: Core Substrate

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: May also include CASRN 10101-41-4 (LT-UNK; No warnings found on HPD Priority lists). Five National Gypsum plants produce gypsum board exclusively with Pre-Consumer (Post-Industrial) byproduct gypsum [Shippingport, PA; Apollo Beach, FL; Mt. Holly, NC; Westwego, LA; Shoals, IN]. Ten 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]. Two National Gypsum plants produce gypsum board with a blend of Pre-Consumer (Post-Industrial) byproduct gypsum and natural rock gypsum [Baltimore, MD; Waukegan, IL].

#### ACID MODIFIED, CORN STARCH

ID: 65996-63-6

%: 0.6000 - 0.7000

GS: NoGS

RC: None

NANO: No

ROLE: Improves Binding and Core Strength

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

#### SOLID GLASS AND GLASS / MINERAL FIBER (SEE VARIANTS)

ID: 65997-17-3

%: 0.2000 - 0.3000

GS: LT-UNK

RC: None

NANO: No

ROLE: Improves Core Strength

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

EU - R-phrases

R40 - Limited Evidence of Carcinogenic Effects

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

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

### SODIUM POLYNAPHTHALENESULFONATE

ID: 9084-06-4

#: **0.0300 - 0.0400** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Dispersant; Reduces process water demand and energy consumption**

|          |   |
|----------|---|
| HAZARDS: | AGENCY(IES) WITH WARNINGS:  |
| PBT      | EC - CEPA DSL<br>Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans |

SUBSTANCE NOTES: This substance falls below the Content Inventory threshold indicated; however, we have included this substance in an effort to provide full transparency for this product. Efforts are being made to find a suitable replacement for this dispersant that has fewer hazards.

### FIRE-SHIELD® SHAFTLINER PAPER FACING

#: **2.0000 - 3.0000**

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 or LT-P1 based on supplier SDS and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES:

### MIXED RECYCLED PAPER (MIXED RECYCLED PAPER)

ID: Not registered

#: **99.3000 - 99.5000** GS: **NoGS** RC: **PostC** NANO: **No** ROLE: **Face and Back Paper; Holds Core**

|            |   |
|------------|---|
| HAZARDS:   | AGENCY(IES) WITH WARNINGS:              |
| None Found | No warnings found on HPD Priority lists |

SUBSTANCE NOTES: 100% of our gypsum board face and back paper is produced with post-consumer recycled content. The company's three paper mills produce paper from discarded cardboard and magazines. This substance does not currently have an assigned CAS number, and thus is not considered to be "Identified" on this HPD. Mixed recycled content is currently considered a "Special Condition" Material by the HPD Open Standard; specific guidelines (Emerging Best Practices) are being created to address known issues related to transparency and disclosure for various materials and substances, including "Recycled Content - Mixtures". This HPD will be updated as appropriate when the HPD Collaborative has established these guidelines.

### STARCH

ID: 9005-25-8

#: **0.3000 - 0.4000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Binder**

|            |   |
|------------|---|
| HAZARDS:   | AGENCY(IES) WITH WARNINGS:              |
| None Found | No warnings found on HPD Priority lists |

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

|                    |            |          |          |                  |
|--------------------|------------|----------|----------|------------------|
| #: 0.2000 - 0.3000 | GS: LT-UNK | RC: None | NANO: No | ROLE: Sizing Aid |
|--------------------|------------|----------|----------|------------------|

## HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Alkenyl Succinic Anhydride

## 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.

### VOC EMISSIONS

#### GREENGUARD Gold Certified

|   |                        |                         |                                  |
|---|------------------------|-------------------------|----------------------------------|
| CERTIFYING PARTY: Third Party   | ISSUE DATE: 2008-12-31 | EXPIRY DATE: 2017-12-31 | CERTIFIER OR LAB: UL Environment |
| APPLICABLE FACILITIES: All  |                        |                         |                                  |
| CERTIFICATE URL:<br><a href="https://spot.ulprospector.com/documents/1429894.pdf?bs=31734&amp;b=684278&amp;st=1&amp;r=na&amp;ind=builtenvironment">https://spot.ulprospector.com/documents/1429894.pdf?bs=31734&amp;b=684278&amp;st=1&amp;r=na&amp;ind=builtenvironment</a> |                        |                         |                                  |

CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 24722-420. UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

### VOC EMISSIONS

#### GREENGUARD Certified

|   |                        |                         |                                  |
|---|------------------------|-------------------------|----------------------------------|
| CERTIFYING PARTY: Third Party   | ISSUE DATE: 2008-12-31 | EXPIRY DATE: 2017-12-31 | CERTIFIER OR LAB: UL Environment |
| APPLICABLE FACILITIES: All  |                        |                         |                                  |
| CERTIFICATE URL:<br><a href="https://spot.ulprospector.com/documents/1429895.pdf?bs=31734&amp;b=684278&amp;st=1&amp;r=na&amp;ind=builtenvironment">https://spot.ulprospector.com/documents/1429895.pdf?bs=31734&amp;b=684278&amp;st=1&amp;r=na&amp;ind=builtenvironment</a> |                        |                         |                                  |

CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 24722-410. UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings.

### OTHER

#### UL Evaluation Report (UL ER R3501-02)

|   |                        |              |                      |
|---|------------------------|--------------|----------------------|
| CERTIFYING PARTY: Third Party   | ISSUE DATE: 2015-06-12 | EXPIRY DATE: | CERTIFIER OR LAB: UL |
| APPLICABLE FACILITIES: All  |                        |              |                      |
| CERTIFICATE URL:<br><a href="https://spot.ulprospector.com/documents/1497964.pdf?bs=31734&amp;b=684279&amp;st=1&amp;r=na&amp;ind=builtenvironment">https://spot.ulprospector.com/documents/1497964.pdf?bs=31734&amp;b=684279&amp;st=1&amp;r=na&amp;ind=builtenvironment</a> |                        |              |                      |

CERTIFICATION AND COMPLIANCE NOTES: UL ER R3501-02. SUBJECT: One, Two, Three, and Four-Hour Fire-Resistive Interior Partition Systems; One and Two-Hour Ceiling Assemblies; Two-Hour Horizontal Membrane and Duct Protection Assemblies. The assemblies consist of steel studs and tracks faced with Gold Bond Fire-Shield Shaftliner gypsum board on one side and Gold Bond gypsum board on the other side. SCOPE OF EVALUATION - Compliance with the following codes: 2006, 2009, 2012, 2015 International Building Code (IBC); 2006, 2009, 2012, 2015 International Residential Code (IRC). The products were evaluated for the following properties: Fire-resistance-rated construction; Structural; Physical

## 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.*

### **GOLD BOND® FIRE- SHIELD® GYPSUM BOARDS**

HPD URL:

<http://designcenter.nationalgypsum.com/sustainability>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Component of Gold Bond® Interior Partition Systems, as referenced in UL Evaluation Report (UL ER R3501-02).

### **GOLD BOND® FIRE- SHIELD® C GYPSUM BOARDS**

HPD URL:

<http://designcenter.nationalgypsum.com/sustainability>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Component of Gold Bond® Interior Partition Systems, as referenced in UL Evaluation Report (UL ER R3501-02).

### **STEEL FRAMING**

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Component of Gold Bond® Interior Partition Systems, as referenced in UL Evaluation Report (UL ER R3501-02).

### **FASTENERS**

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

As referenced in UL Evaluation Report (UL ER R3501-02).

## Section 5: General Notes

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

## Section 6: References

### **MANUFACTURER INFORMATION**

MANUFACTURER: **National Gypsum Company**

ADDRESS: **2001 Rexford Road  
Charlotte, NC 28211 USA**

WEBSITE: **www.nationalgypsum.com**

CONTACT NAME: **Warren Barber**

TITLE: **Manager - Technical Marketing**

PHONE: **704-365-7494**

EMAIL: **WarrenB@nationalgypsum.com**

## KEY

|                  |  |
|------------------|--|
| <b>OSHA MSDS</b> | Occupational Safety and Health Administration Material Safety Data Sheet                 |
| <b>GHS SDS</b>   | Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet |

## Hazard Types

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

## GreenScreen (GS)

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

## Recycled Types

|   |
|---|
| <b>PreC</b> Preconsumer (Post-Industrial)           |
| <b>PostC</b> Postconsumer                           |
| <b>Both</b> Both Preconsumer and Postconsumer       |
| <b>Unk</b> Inclusion of recycled content is unknown |
| <b>None</b> 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

|  |
|--|
| <b>Nano</b> Composed of nano scale particles or nanotechnology                     |
| <b>Third Party Verified</b> Verification by independent certifier approved by HPDC |
| <b>Preparer</b> Third party preparer, if not self-prepared by manufacturer         |
| <b>Applicable facilities</b> Manufacturing sites to which testing applies          |

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.