

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

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

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 See Section 3 for additional listings.

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

Third Party Verified?

- Yes
 No

PREPARER: Elixir Environmental

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2018-08-06

PUBLISHED DATE: 2018-08-06

EXPIRY DATE: 2021-08-06



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.hpdc-collaborative.org/hpd-2-1-standard

HIGH STRENGTH FIRE-SHIELD® LITE® GYPSUM CORE

#: 95.2000 - 96.0000

HPD URL:

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: 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).

OTHER MATERIAL NOTES: Percent by weight of Material and Substances reported as range to account for variations between manufacturing facilities.

GYPSUM

ID: 13397-24-5

#: 93.1000 - 93.6000

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). 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].

VERMICULITE

ID: 1318-00-9

#: 5.0000 - 5.5000

GS: NoGS

RC: None

NANO: No

ROLE: Improves Fire Resistance

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Supplier confirms no asbestos detected (EPA method EPA/600/R-93/116).

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

#: **0.6000 - 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).

OTHER MATERIAL NOTES: **Percent by weight of Material and Substances reported as range to account for formulation variations between manufacturing facilities.**

MIXED RECYCLED PAPER

ID: **Not registered**

#: **99.0000 - 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 recyclable content. The company's three paper mills produce paper from discarded cardboard and magazines.**

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

ID: **68784-12-3**

#: **0.3000 - 0.4000** 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**

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.**

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

UL/GreenGuard Certified

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2008-**

EXPIRY DATE: **2018-**

CERTIFIER OR LAB: **UL**

APPLICABLE FACILITIES: **Apollo Beach, FL, USA;**

12-31

12-28

Environment

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:

<http://certificates.ulenvironment.com/default.aspx?id=20455&t=gg>

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 m². Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.**

VOC EMISSIONS

UL/GreenGuard Gold Certified

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2008-**

EXPIRY DATE: **2018-**

CERTIFIER OR LAB: **UL**

APPLICABLE FACILITIES: **Apollo Beach, FL, USA;**

12-31

12-28

Environment

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:

<http://certificates.ulenvironment.com/default.aspx?id=20455&t=cs>

CERTIFICATION AND COMPLIANCE NOTES: **Certificate Number: 20455-420. UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Building products and interior finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office and Classroom Environment. Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.**

MULTI-ATTRIBUTE

Type III Environmental Product Declaration (EPD)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2014-**

EXPIRY DATE:

CERTIFIER OR LAB:

APPLICABLE FACILITIES: **All**

05-01

2019-05-31

FPIInnovations

CERTIFICATE URL:

<https://fpinnovations.ca/ResearchProgram/environment-sustainability/epd-program/Documents/epd-gypsum.pdf>

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.**

CERTIFYING PARTY: **Self-declared**ISSUE DATE: **2018-04-01**EXPIRY DATE: **2019-04-01**CERTIFIER OR LAB: **International Living Future Institute**

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>

CERTIFICATION AND COMPLIANCE NOTES: **Declare ID: NGC-0018, NGC-0019, NGC-0020, NGC-0021, NGC-0022, NGC-0023, NGC-0024, NGC-0025, NGC-0026, NGC-0027. Life Expectancy: 60+ Years. End of Life: Recyclable. CDPH Standard Method v1.1 Compliant: Yes. LBC Exceptions: I10-E4 Proprietary Ingredients <1%**

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

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.