

CLASSIFICATION: 07 50 00 Membrane Roofing

created via: HPDC Online Builder

PRODUCT DESCRIPTION: DEXcell® BRAND Cement Roof Board provides an exceptionally hard, durable surface that withstands prolonged exposure to moisture. Its composition of Portland cement and lightweight aggregate with heavy duty fiberglass-mesh facers makes it an excellent fire and thermal barrier. This mold- and moisture-resistant cement panel is a substrate board, thermal barrier and coverboard for commercial roofing applications. Use it for a wide variety of roofing systems, including fully adhered, mechanically attached and ballasted roofs using single-ply membranes, modified bitumen, fluid-applied, built-up roofing, spray foam and metal. This HPD covers 7/16" DEXcell® BRAND Cement Roof Board.

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

Percent Weight and Role Provided?

- Yes
- No

Screened

Using Priority Hazard Lists with Results Disclosed?

- Yes
- No

Identified

Name and Identifier Provided?

- Yes
- No

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

DEXCELL CEMENTITIOUS CORE [QUARTZ **LT-1** | CAN FLY ASH **LT-UNK** PORTLAND CEMENT **LT-P1** | CAN | END HIGH-ALUMINA CEMENT **LT-UNK** POLYSTYRENE **LT-UNK** CALCIUM HYDROXIDE **LT-P1** 2-NAPHTHALENESULFONIC ACID, POLYMER WITH FORMALDEHYDE, SODIUM SALT **LT-P1** | PBT | FIBERGLASS SCRIM [GLASS / MINERAL FIBER **LT-UNK** | CAN PVC RELATED POLYMERS **NoGS** DIISONONYL PHTHALATE (DINP-1, MIXTURE OF ISOMERS AS MANUFACTURED) **LT-1** | CAN | DEL | MUL | END | REP BARIUM ZINC COMPLEX **NoGS** UNDISCLOSED **LT-UNK** | CAN]

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 considered proprietary to suppliers, or are those without a registered identifier.

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: UL/GreenGuard Gold Certified
VOC emissions: UL/GreenGuard Certified

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: 2017-10-12
PUBLISHED DATE: 2017-10-19
EXPIRY DATE: 2020-10-12

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

DEXCELL CEMENTITIOUS CORE

%: 97.5000 - 99.5000

HPD URL:

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are 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 that are not otherwise disclosed as intentionally added ingredients (Quartz/Silica), based on batch testing and supplier SDS.

OTHER MATERIAL NOTES: Percent by weight of substances reported as range to protect the proprietary nature of this formulation.

QUARTZ

ID: 14808-60-7

%: 50.0000 - 60.0000 GS: **LT-1** RC: **None** NANO: **No** ROLE: **Filler; Impurity/Residual**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
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	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: Masonry sand; Crystallized silicon dioxide. Natural substance that is widely used in metal extraction, paints, polymers, cleaning agents, coloring agents, and fillers. 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>). May also represent impurity of other components of this material.

FLY ASH

ID: 68131-74-8

%: 25.0000 - 35.0000 GS: **LT-UNK** RC: **PreC** NANO: **No** ROLE: **Binder**

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

SUBSTANCE NOTES: Type C fly ash. All fly ash added to the product is a Pre-Consumer (Post-Industrial) byproduct of coal generated power plants. The percentage of this ingredient may vary depending on plant and raw material availability. The sum of heavy metals tested (Cadmium, Lead, Chromium, Mercury) was found to be <0.01% in the finished product.

PORTLAND CEMENT

ID: 65997-15-1

%: 5.0000 - 15.0000 GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Binder**

HAZARDS:	AGENCY(IES) WITH WARNINGS:	
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Type I/II Portland Cement. The National Institute of Standards and Technology lists the composition of Portland Cement as including: Calcium Oxide (CAS No. 1305-78-8), 64%; Silicon Dioxide (7631-86-9), 20%; Aluminum Oxide (1344-28-1), 5%; Iron III Oxide (1309-37-1), 4%; Sulfur Trioxide (7446-11-9), 3%; Magnesium Oxide (1309-48-4), 1% (Pharos CML). The percentage of this ingredient may vary depending on plant and raw material availability.

HIGH-ALUMINA CEMENT

ID: 65997-16-2

#: 1.0000 - 10.0000 GS: LT-UNK RC: None NANO: No ROLE: Binder, Set Accelerator

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

POLYSTYRENE

ID: 9003-53-6

#: 0.1000 - 1.0000 GS: LT-UNK RC: None NANO: No ROLE: Filler, Reduces Board Weight

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

CALCIUM HYDROXIDE

ID: 1305-62-0

#: 0.1000 - 1.0000 GS: LT-P1 RC: None NANO: No ROLE: Accelerator

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

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

2-NAPHTHALENESULFONIC ACID, POLYMER WITH FORMALDEHYDE, SODIUM SALT

ID: 36290-04-7

#: 0.1000 - 1.0000 GS: LT-P1 RC: None NANO: No ROLE: Reduces Process Water Demand

HAZARDS: AGENCY(IES) WITH WARNINGS:

PBT EC - CEPA DSL Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans

SUBSTANCE NOTES: This ingredient is not used in our Jacksonville, FL plant.

FIBERGLASS SCRIM

#: 0.5000 - 2.5000 HPD URL: <https://builder.hpd-collaborative.org/uploads/files/hpds/1037/4436-20160816104528.pdf>

MATERIAL THRESHOLD: 100 ppm RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Supplier HPD claims Residuals Disclosure as "Measured 100 ppm".

OTHER MATERIAL NOTES: Material information based on Supplier's published HPD (v1.0; 08.16.2016).

GLASS / MINERAL FIBER

ID: 65997-17-3

#: 38.0000 - 45.0000 GS: LT-UNK RC: None NANO: No ROLE: Core Yarn

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:

PVC RELATED POLYMERS

ID: 9002-86-2

#: **33.0000 - 38.0000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Polymer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

DIISONONYL PHTHALATE (DINP-1, MIXTURE OF ISOMERS AS MANUFACTURED)

ID: 68515-48-0

#: **18.0000 - 21.0000** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Plasticizer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

CA EPA - Prop 65

Carcinogen

DEVELOPMENTAL

US NIH - Reproductive & Developmental Monographs

Some Evidence of Adverse Effects - Developmental Toxicity

RESTRICTED LIST

US EPA - PPT Chemical Action Plans

EPA Chemical of Concern - Action Plan published

ENDOCRINE

ChemSec - SIN List

Endocrine Disruption

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

REPRODUCTIVE

US EPA - PPT Chemical Action Plans

Reproductive effects

SUBSTANCE NOTES:

BARIUM ZINC COMPLEX

ID: **Not registered**

#: **1.0000 - 2.0000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Heat Stabilizer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES:

UNDISCLOSED

#: **1.0000 - 1.5000** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Processing Aid**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Supplier HPD lists this as a "Proprietary Ingredient". All hazards disclosed in Supplier HPD have been included.

This section lists applicable certification and standards 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 Gold Certified

CERTIFYING PARTY: Third Party	ISSUE	EXPIRY	CERTIFIER OR
APPLICABLE FACILITIES: All	DATE: 2017-03-03	DATE: 2017-12-31	LAB: UL
CERTIFICATE URL: https://spot.ulprospector.com/documents/1511389.pdf?bs=31734&b=712031&st=1&sl=52487495&crit=a2V5d29yZDpbZGV4Y2VsbF0%3d&k=dexcell&r=na&ind=builtenvironment			Environment
CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 87133-420. UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.			

VOC EMISSIONS

UL/GreenGuard Certified

CERTIFYING PARTY: Third Party	ISSUE	EXPIRY	CERTIFIER OR
APPLICABLE FACILITIES: All	DATE: 2017-03-03	DATE: 2017-12-31	LAB: UL
CERTIFICATE URL: https://spot.ulprospector.com/documents/1511390.pdf?bs=31734&b=712031&st=1&sl=52487495&crit=a2V5d29yZDpbZGV4Y2VsbF0%3d&k=dexcell&r=na&ind=builtenvironment			Environment
CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 87133-410. UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.			

+ 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.

No accessories are required for this product.

📖 Section 5: General Notes

👁️ 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

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

GLO Global warming
MAM Mammalian/systemic/organ toxicity
MUL Multiple hazards
NEU Neurotoxicity

PHY Physical Hazard (reactive)
REP Reproductive toxicity
RES Respiratory sensitization
SKI Skin sensitization/irritation/corrosivity

EYE Eye irritation/corrosivity
GEN Gene mutation

OZO Ozone depletion
PBT Persistent Bioaccumulative Toxic

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.