

HPD UNIQUE IDENTIFIER: 31500

CLASSIFICATION: 09 28 00 Backing Boards and Underlayments

PRODUCT DESCRIPTION: PermaBASE® Cement Board provides a durable surface designed to withstand prolonged exposure to moisture. Made with Portland cement, aggregate, and fiberglass mesh, it works well as an underlayment for tub and shower surrounds, countertops, flooring, and a variety of other interior and exterior applications. Lightweight and easy to install with EdgeTech® Technology that allows a closer nail or screw application. This HPD covers 1/2" and 5/8" PermaBASE Cement Board. National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC, PermaBASE Building Products, LLC and ProForm Finishing Products, LLC.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
☒ Nested Materials Method	☐ 100 ppm	Completed in 2 of 2 Materials	Characterized ☒ Yes ☐ No
☐ Basic Method	☒ 1,000 ppm	Explanation(s) provided for Residuals/Impurities?	<i>Provided weight and role.</i>
Threshold Disclosed Per	☐ Per GHS SDS	☒ Yes ☐ No	Screened ☒ Yes ☐ No
☐ Material	☐ Other		<i>Provided screening results using HPDC-approved methods.</i>
☒ Product			Identified ☐ Yes ☒ No
			<i>Provided name and CAS RN or other identifier.</i>

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.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

CEMENTITIOUS CORE [FLY ASH LT-UNK PORTLAND CEMENT LT-P1] CAN | END | MAM HIGH-ALUMINA CEMENT LT-UNK POLYSTYRENE LT-UNK CALCIUM HYDROXIDE LT-P1 | SKI | MAM | EYE 2-NAPHTHALENESULFONIC ACID, POLYMER WITH FORMALDEHYDE, SODIUM SALT LT-P1 | PBT MASONRY SAND] FIBERGLASS SCRIM [CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE LT-UNK POLYVINYL CHLORIDE LT-P1 | MAM DIISONONYL PHTHALATE (DINP-2 OR DINP-3, MIXTURE OF ISOMERS AS MANUFACTURED) BM-1 | END | CAN | DEV | REP UNDISCLOSED LT-P1 | MUL]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [GeologicalMaterial]

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.3, 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. Substances not "Identified" are those that are proprietary to suppliers.

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

Other: UL Evaluation Report (UL ER22158-01)

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

☐ Yes

PREPARER: Elixir Environmental

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2023-02-22

PUBLISHED DATE: 2023-02-22

EXPIRY DATE: 2026-02-22

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 2.3, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-3-standard

CEMENTITIOUS CORE		%: 97.1000 - 97.5000	
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material	
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 information provided in supplier disclosures and as predicted by process chemistry (Pharos CML) for most substances. Testing has confirmed that heavy metals are not present in Fly Ash (68131-74-8) above 0.01%.			
OTHER MATERIAL NOTES: Percent by weight of material and substances reported as ranges to account for formulation variations between products and manufacturing facilities, and to further protect the proprietary nature of this formulation.			

MASONRY SAND			ID: Geological Material	
HAZARD DATA SOURCE: HPDC Special Conditions Policy				
%: 50.0000 - 60.0000	GreenScreen: Not Required	RC: None	NANO: No	MATERIAL ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
Hazard Screening is not applicable to this Special Condition				
INGREDIENT DESCRIPTION AND COMPOSITION: Crystallized silicon dioxide.				
COUNTRY OF ORIGIN: USA				
RADIOACTIVE ELEMENTS: According to supplier provided information and/or internal testing, it is determined that no radioactive elements are found in this material.				
POTENTIAL PRESENCE OF TOXIC METALS: According to supplier provided information and/or internal testing, it is determined that no toxic metals are found in this material.				
MATERIAL CONTENT NOTES: Natural substance that is widely used in metal extraction, paints, polymers, cleaning agents, coloring agents, and fillers. Silica is one of several compounds with warnings restricted to respirable forms; exposures to respirable crystalline silica are not expected during the recommended use of this product.				

FLY ASH				ID: 68131-74-8
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:50		
%: 25.0000 - 30.0000	GreenScreen: LT-UNK	RC: PreC	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found	No warnings found on HPD Priority Hazard Lists			
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found	No listings found on Additional Hazard 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

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:51		
?: 10.0000 - 15.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

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

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:51		
?: 1.0000 - 5.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES:

POLYSTYRENE

ID: 9003-53-6

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:52		
?: 0.1000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
SUBSTANCE NOTES:		

CALCIUM HYDROXIDE

ID: 1305-62-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:53		
%: 0.1000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Processing regulator
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
SKI	GHS - Australia		H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
SKI	GHS - New Zealand		Skin corrosion category 1C	
EYE	GHS - New Zealand		Serious eye damage category 1	
EYE	GHS - Japan		H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]	
SKI	GHS - Japan		H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]	
EYE	GHS - Australia		H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes of Problematic Chemicals	
			Antimicrobials	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)		C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022	
			Cosmetics & Personal Care Products	
SUBSTANCE NOTES:				

2-NAPHTHALENESULFONIC ACID, POLYMER WITH FORMALDEHYDE, SODIUM SALT

ID: 36290-04-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:53		
%: 0.1000 - 1.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Processing regulator

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Reduces process water demand. This ingredient is not used in our Green Cove Springs, FL plant.		

FIBERGLASS SCRIM	%: 2.5000 - 2.9000	
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Glass
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 information provided in supplier disclosure and as predicted by process chemistry (Pharos CML).		
OTHER MATERIAL NOTES: Percent by weight of material and substances reported as ranges to account for formulation variations between products and manufacturing facilities, and to further protect the proprietary nature of this formulation.		

CONTINUOUS FILAMENT GLASS FIBER, NON-RESPIRABLE					ID: 65997-17-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:53			
%: 35.0000 - 40.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component	
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS			
None found		No warnings found on HPD Priority Hazard Lists			
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION			
None found		No listings found on Additional Hazard Lists			
SUBSTANCE NOTES:					

POLYVINYL CHLORIDE					ID: 9002-86-2
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:54			
%: 35.0000 - 40.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Polymer species	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Core Restrictions
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2022 Red List substances to avoid in Living Building Challenge V4.0 projects
SUBSTANCE NOTES:		

DIISONONYL PHTHALATE (DINP-2 OR DINP-3, MIXTURE OF ISOMERS AS MANUFACTURED)

ID: 28553-12-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:55		
%: 10.0000 - 15.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor		
END	ChemSec - SIN List	Endocrine Disruption		
CAN	CA EPA - Prop 65	Carcinogen		
DEV	US NIH - Reproductive & Developmental Monographs	Some Evidence of Adverse Effects - Developmental Toxicity		
END	EU - Priority Endocrine Disruptors	Category 2 - In vitro evidence of biological activity related to Endocrine Disruption		
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]		

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Perkins+Will (P+W)	P&W - Precautionary List Precautionary list of substances recommended for avoidance
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Bisphenols and Phthalates
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPPI)	C2C Certified v4 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	International Living Future Institute (ILFI)	Living Building Challenge 4.0 - Red List of Materials & Chemicals - Effective April 1, 2022 Red List substances to avoid in Living Building Challenge V4.0 projects
SUBSTANCE NOTES: GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool.		

UNDISCLOSED

ID: **Undisclosed**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-02-22 11:43:55		
%: 5.0000 - 10.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Processing regulator
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes of Problematic Chemicals Some Solvents		

SUBSTANCE NOTES: Supplier has shared substance identity under the terms of a non-disclosure agreement with third-party preparer; substance to remain proprietary to supplier. Substance has been screened against HPD Priority Lists using the HPD Builder with results disclosed.

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 Gold Certified	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Clinton, IN; Cleburne, TX; Green Cove Springs, FL; Bromont, Canada. CERTIFICATE URL: https://tinyurl.com/47jd96ux	ISSUE DATE: 2009-12-31 EXPIRY DATE: 2023-12-28	CERTIFIER OR LAB: UL Environment
CERTIFICATION AND COMPLIANCE NOTES: Certificate Number: 9433-420. Restrictions: Certified as an assembly only. 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 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.		
OTHER	UL Evaluation Report (UL ER22158-01)	
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: Clinton, IN; Cleburne, TX; Green Cove Springs, FL; Bromont, Canada. CERTIFICATE URL: http://tinyurl.com/ze7vjmsx	ISSUE DATE: 2017-03-31 EXPIRY DATE:	CERTIFIER OR LAB: UL
CERTIFICATION AND COMPLIANCE NOTES: SUBJECT: PERMABASE CEMENTITIOUS BACKER UNITS. Revised: December 6, 2019. SCOPE OF EVALUATION: 2012, 2015, 2018 International Building Code ® (IBC); 2012, 2015, 2018 International Residential Code ® (IRC); 2012, 2015, 2018 International Mechanical Code® (IMC). Properties evaluated: Surface Burning Characteristics (ANSI/UL723, ASTM E84); Fire-resistance-rated construction (ANSI/UL263, ASTM E119); Physical properties; Structural; Durability; Noncombustible construction.		

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.

FASTENERS
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD available ACCESSORY TYPE: Installation Accessory CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: As referenced in UL Evaluation Report (UL ER22158-01).
STEEL FRAMING
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD available ACCESSORY TYPE: Installation Accessory CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: As referenced in UL Evaluation Report (UL ER22158-01).
ALKALI-RESISTANT FIBERGLASS MESH TAPE
MANUFACTURER (OR GENERIC): Generic
HPD URL: No HPD available ACCESSORY TYPE: Installation Accessory CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Used to treat joints and/or reinforce seams, edges, corners and all openings around fixtures, as per UL Evaluation Report (UL ER22158-01).

MORTAR OR ADHESIVE
MANUFACTURER (OR GENERIC): **Generic**

HPD URL: No HPD available
ACCESSORY TYPE: Adhesive
CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Used to treat joints and/or reinforce seams, edges, corners and all openings around fixtures, as per UL Evaluation Report (UL ER22158-01).

 Section 5: General Notes

MANUFACTURER INFORMATION

MANUFACTURER: PermaBASE Building Products, LLC provided by
National Gypsum Company
ADDRESS: 2001 Rexford Road
Charlotte NC 28211, USA
WEBSITE: www.permabase.com

CONTACT NAME: Amy Hockett
TITLE: Manager - Architectural Services & Sustainability
PHONE: 704-365-7931
EMAIL: AmyH@NationalGypsum.com

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

AQU Aquatic toxicity	LAN Land toxicity	PHY Physical hazard (flammable or reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive
DEV Developmental toxicity	MUL Multiple	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	NF Not found on Priority Hazard Lists	UNK Unknown
GEN Gene mutation	OZO Ozone depletion	
GLO Global warming	PBT Persistent, bioaccumulative, and toxic	

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible 1 (Possible Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS No GreenScreen.
BM-U Benchmark Unspecified (due to insufficient data)	

GreenScreen Benchmark scores sometimes also carry subscripts, which provide more context for how the score was determined. These are DG (data gap), TP (transformation product), and CoHC (chemical of high concern). For more information, see 2.2.2.4 GreenScreen® for Safer Chemicals, www.greenscreenchemicals.org, and Best Practices for Hazard Screening on the HPDC website (hpd-collaborative.org).

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

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

