# **DensArmor Plus® Gypsum Panels** by Georgia-Pacific

**Health Product** Declaration v2.3

created via: HPDC Online Builder

**HPD UNIQUE IDENTIFIER: 29518** 

CLASSIFICATION: 09 29 00 Gypsum Board

PRODUCT DESCRIPTION: This HPD covers the following Glass Mat Faced Gypsum Panels: DensArmor Plus® Interior Gypsum Panels, DensArmor Plus® Fireguard C® Interior Gypsum Panels, and DensArmor Plus® Fireguard® Abuse Resistant Gypsum Panels. DensArmor Plus® panels are ideal for moisture-prone commercial and residential interior spaces. They incorporate fiberglass mats front and back, instead of paper facings, and a moisture-resistant core for superior moisture and mold resistance when compared to traditional paper-faced drywall.

# Section 1: Summary

## **Basic Method / Product Threshold**

#### **CONTENT INVENTORY**

**Inventory Reporting Format** 

Nested Materials Method

Basic Method

**Threshold Disclosed Per** 

Material

Product

**Threshold Level** 

C 100 ppm

⊙ 1,000 ppm

O Per GHS SDS

Other

**Residuals/Impurities Evaluation** 

Completed

C Partially Completed

O Not Completed

Explanation(s) provided:

Yes O No.

For all contents above the threshold, the manufacturer has:

Characterized

Yes ○ No

⊙ Yes ○ No

Provided weight and role.

Screened

Provided screening results using HPDC-approved

methods.

Identified

Yes No

Provided name and CAS RN or other identifier.

#### 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.

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY

**GREENSCREEN SCORE | HAZARD TYPE** 

**DENSARMOR PLUS® GYPSUM PANELS [ CALCIUM SULFATE** 

DIHYDRATE LT-UNK | DEV | MAM WATER BM-4 VERMICULITE NoGS

LIMESTONE BM-3dg QUARTZ BM-1 | CAN

POLY(METHYLHYDROSILOXANE) NoGS FLY ASH LT-UNK | KAOLIN

LT-UNK | CAN UNDISCLOSED LT-P1 | MUL UNDISCLOSED LT-UNK

UNDISCLOSED LT-P1 | MUL POTASSIUM SULFATE LT-UNK PORTLAND CEMENT LT-P1 | CAN | END UNDISCLOSED ]

Number of Greenscreen BM-4/BM3 contents ... 2

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

Nanomaterial ... No

**INVENTORY AND SCREENING NOTES:** 

Special Conditions applied: [GeologicalMaterial]

The information in this HPD is based on information provided by Georgia-Pacific Gypsum and its vendors as of the date of this HPD. In this regard, Georgia-Pacific and the HPDC Approved Preparer sought information from vendors regarding intentionally added ingredients, residuals and impurities, down to the 1,000 ppm threshold. However, Georgia-Pacific Gypsum makes no representations or warranties, expressed or implied, with respect to the subject matter hereof. Liability is expressly disclaimed.

## **VOLATILE ORGANIC COMPOUND (VOC) CONTENT**

VOC Content data is not applicable for this product category.

**CERTIFICATIONS AND COMPLIANCE** See Section 3 for additional

listinas.

VOC emissions: UL/GreenGuard Gold Certified

#### **CONSISTENCY WITH OTHER PROGRAMS**

No pre-checks completed or disclosed.

Third Party Verified?

O Yes ⊙ No

PREPARER: ToxServices LLC

VERIFIER: **VERIFICATION #:**  **SCREENING DATE: 2022-06-23 PUBLISHED DATE: 2022-08-09** EXPIRY DATE: 2025-06-23



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

#### **DENSARMOR PLUS® GYPSUM PANELS**

PRODUCT THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

RESIDUALS AND IMPURITIES NOTES: The information in this HPD is based on information provided by Georgia-Pacific Gypsum and its vendors as of the date of this HPD. In this regard, Georgia-Pacific and the HPDC Approved Preparer sought information from vendors regarding intentionally added ingredients, residuals and impurities, down to the 1,000 ppm threshold. However, Georgia-Pacific Gypsum makes no representations or warranties, expressed or implied, with respect to the subject matter hereof. Liability is expressly disclaimed.

OTHER PRODUCT NOTES: This HPD is being used to describe a series of products that are generally similar in content but differ in the percentages of some ingredients. The maximum range accounts for the difference in these ingredients and alternate suppliers.

CALCIUM SULFATE DIHY	'DRATE		ID: 10101-41-4
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	SCREENING DATE: 2022-07-21 6:32:05
%: 88.2000 - 99.0000	GreenScreen: LT-UNK	RC: None	NANO: No SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS
DEV	MAK		Pregnancy Risk Group C
МАМ	GHS - Japan		H335 or H336 [Specific target organs/systemic toxicity following single exposure - Category 3]
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION
None found			No listings found on Additional Hazard Lists
SUBSTANCE NOTES:			

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2022-06-23 12:56:26	
%: <b>0.2925 - 5.7471</b>	GreenScreen: BM-4	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Solvent	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
None found			No warr	nings found on HPD Priority Hazard	l Lis
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION		
None found			No	listings found on Additional Hazard	l Lis

UNDISCLOSED ID: Geological Material

HAZARD DATA SOURCE: HPDC Special Conditions Policy

%: 0.6747 - 2.5093 GreenScreen: Not Required RC: None NANO: No MATERIAL ROLE: Structure component

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

Hazard Screening is not applicable to this Special Condition

INGREDIENT DESCRIPTION AND COMPOSITION: N/A

COUNTRY OF ORIGIN: United States

RADIOACTIVE ELEMENTS: Unknown

POTENTIAL PRESENCE OF TOXIC METALS: Unknown

MATERIAL CONTENT NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name for this chemical have been redacted from this substance. 2

This disclosure does not provide potential presence of radioactive elements which may be found in certain geological materials. This disclosure does not provide potential presence of toxic metals which may be found in certain geological materials.

VERMICULITE ID: 1318-00-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-06-23 12:59:55

%: 0.0000 - 2.5000 GreenScreen: NoGS RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS AGENCY NOTIFICATION

None found No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

LIMESTONE ID: 1317-65-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2022-06-23 12:54:16

%: 0.6250 - 2.0250 GreenScreen: BM-3dg RC: None NANO: No SUBSTANCE ROLE: Structure component

HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

ADDITIONAL LISTINGS AGENCY NOTIFICATION

None found No listings found on Additional Hazard Lists

SUBSTANCE NOTES: The GreenScreen® Benchmark assessment score of BM-3dg was provided through the HPD 2.2 Builder Tool.

QUARTZ ID: 14808-60-7

HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD S	CREENING DATE: 2022-06-23 12:54:44
%: 0.0000 - 1.0260	GreenScreen: BM-1	RC: None	NANO: No SUBSTANCE ROLE: Structure componen
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS
CAN	US CDC - Occupational Carcin	ogens	Occupational Carcinogen
CAN	CA EPA - Prop 65		Carcinogen - specific to chemical form or exposure route
CAN	US NIH - Report on Carcinoger	าร	Known to be Human Carcinogen (respirable size - occupational setting)
CAN	MAK		Carcinogen Group 1 - Substances that cause cancer in man
CAN	IARC		Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CAN	IARC		Group 1 - Agent is Carcinogenic to humans
CAN	GHS - Japan		H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia		H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
CAN	GHS - New Zealand		Carcinogenicity category 1
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION
None found			No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Th	e GreenScreen® Benchmark assessment	score of BM-	1 was provided through the HPD 2.2 Builder Tool.

POLY(METHYLHYDROSII	LOXANE)			ID: 63148-57-2
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2022-06-23 12:57:33
%: 0.6500 - 1.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Water resistance
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found			No wari	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists
SUBSTANCE NOTES:				

FLY ASH				ID: 68131-74-8
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DAT	TE: 2022-07-21 6:36:02
%: <b>0.0000 - 1.0000</b>	GreenScreen: LT-UNK	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
	EC - CEPA DSL		Persistent	

ADDITIONAL LISTINGS	AGENCY	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES:

SUBSTANCE NOTES:

KAOLIN				ID: 1332-58-7
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DA	TE: 2022-06-23 13:02:21
%: 0.4000 - 0.8750	GreenScreen: LT-UNK	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
CAN	MAK		•	Group 3B - Evidence of carcinogenic effects cient for classification
ADDITIONAL LISTINGS	AGENCY		NOTIFICATIO	DN
None found				No listings found on Additional Hazard Lists

UNDISCLOSED				ID: Undisclosed
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2022-06-23 12:51:13
%: 0.2070 - 0.5625	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Adhesive
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
MUL	German FEA - Substances Haza Waters	rdous to	Class 2 - Hazard	I to Waters
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 3

			ID: Undisclosed
Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2022-06-23 12:49:10
GreenScreen: LT-UNK	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Water resistance
AGENCY AND LIST TITLES		WARNINGS	
		No warr	nings found on HPD Priority Hazard Lists
AGENCY		NOTIFICATION	
		No	listings found on Additional Hazard Lists
	GreenScreen: LT-UNK  AGENCY AND LIST TITLES	GreenScreen: LT-UNK RC: None  AGENCY AND LIST TITLES	GreenScreen: LT-UNK RC: None NANO: No  AGENCY AND LIST TITLES WARNINGS  No warn  AGENCY NOTIFICATION

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 1

UNDISCLOSED				IC	): Undisclosed
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2022-06-23 12:52:25	
%: 0.0450 - 0.1500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: A	dhesive
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS		
MUL	German FEA - Substances Haza Waters	rdous to	Class 2 - Hazaro	to Waters	
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION		
None found			No	listings found on Additiona	Hazard Lists

SUBSTANCE NOTES: The HPDC Approved Preparer obtained full disclosure down to the 1,000 ppm threshold for the trade name ingredient containing this chemical. Due to the proprietary nature of the information, the name and CAS number for this chemical have been redacted from this substance. 4

POTASSIUM SULFATE				ID: <b>7778-80-</b> 5
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD SO	CREENING DATE:	2022-06-23 12:58:57
%: 0.0000 - 0.1500	GreenScreen: LT-UNK	RC: None	NANO: <b>No</b>	SUBSTANCE ROLE: Accelerator
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
None found			No warr	nings found on HPD Priority Hazard Lists
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION	
None found			No	listings found on Additional Hazard Lists
SUBSTANCE NOTES:				

PORTLAND CEMENT				ID: 65997-15-1
HAZARD DATA SOURCE:	Pharos Chemical and Materials Library	HAZARD S	CREENING DA	TE: 2022-06-23 13:00:54
%: 0.0000 - 0.1000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
CAN	MAK		ŭ	Group 3B - Evidence of carcinogenic effects cient for classification
END	TEDX - Potential Endocrine Disr	uptors	Potential En	docrine Disruptor
ADDITIONAL LISTINGS	AGENCY		NOTIFICATION	ON
None found				No listings found on Additional Hazard Lists
SUBSTANCE NOTES:				



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: All facilities

ISSUE DATE: 2007-02-06 EXPIRY DATE: 2023-02-06 CERTIFIER OR LAB: UL

**CERTIFICATE URL:** 

CERTIFICATION AND COMPLIANCE NOTES: Certification covers the following models: DensArmor Plus® High-Performance Interior Panel, DensArmor Plus® Abuse-Resistant Interior Panel, and DensArmor Plus® Impact Resistant Interior Panel. Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr<sup>-1</sup> and a loading of 94.60 m<sup>2</sup>. Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office Environment with an air change of 0.68 hr<sup>-1</sup> and a loading of 33.40 m<sup>2</sup>. Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.



# 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

The information in this HPD is based on information provided by Georgia-Pacific Gypsum and its vendors as of the date of this HPD. In this regard, Georgia-Pacific and the HPDC Approved Preparer sought information from vendors regarding intentionally added ingredients, residuals and impurities, down to the 1,000 ppm threshold. However, Georgia-Pacific Gypsum makes no representations or warranties, expressed or implied, with respect to the subject matter hereof. Liability is expressly disclaimed.

#### MANUFACTURER INFORMATION

MANUFACTURER: Georgia-Pacific ADDRESS: 133 Peachtree Street, NE

Floor 9 Atlanta GA 30303, USA

WEBSITE: http://www.buildgp.com/georgia-pacific-gypsum

CONTACT NAME: Barry Reid, LEED AP BD+C
TITLE: Building Envelope Technical Manager

PHONE: **770-688-3888**EMAIL: bsreid@gapac.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.

**Hazard Types** 

**KEY** 

**AQU** Aquatic toxicity

CAN Cancer

**DEV** Developmental toxicity **END** Endocrine activity

EYE Eye irritation/corrosivity

**GEN** Gene mutation

**GLO** Global warming

LAN Land toxicity

MAM Mammalian/systemic/organ toxicity

MUL Multiple
NEU Neurotoxicity

NF Not found on Priority Hazard Lists

**OZO** Ozone depletion

PBT Persistent, bioaccumulative, and toxic

PHY Physical hazard (flammable or reactive)

**REP** Reproductive

**RES** Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

**UNK** Unknown

#### 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 (due to insufficient data)

LT-P1 List Translator Possible 1 (Possible Benchmark-1)

LT-1 List Translator 1 (Likely Benchmark-1)
LT-UNK List Translator Benchmark Unknown

NoGS No GreenScreen.

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

