

HPD UNIQUE IDENTIFIER: 114228526080

CLASSIFICATION: 07 21 00 Thermal Insulation

PRODUCT DESCRIPTION: A 15 lb./ft³ (240 kg/m³) SFRM intended for the fire protection of interior structural columns, beams, joists, decks, walls, roofs, girders, floors and pre-cast concrete units. It is tested and certified for fire resistance ratings up to 4 hours.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Table with 4 columns: Inventory Reporting Format, Threshold Level, Residuals/Impurities Evaluation, and Characterized/Screened/Identified. Includes options for reporting methods, thresholds, and evaluation results.

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®.

Number of Greenscreen BM-4/BM3 contents ... 1
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1
Nanomaterial ... No

PRODUCT | MATERIAL OR SUBSTANCE | RESIDUAL OR IMPURITY GREENSCREEN SCORE | HAZARD TYPE
SOUTHWEST TYPE 5GP | CALCIUM SULFATE HEMIHYDRATE | LT-UNK | MAM VERMICULITE NoGS PULP, CELLULOSE (PRIMARY CASRN IS 65996-61-4) NoGS LIMESTONE (PRIMARY CASRN IS 1317-65-3) BM-3dg QUARTZ BM-1 * | CAN | MAM | GEN CALCIUM HYDROXIDE | LT-P1 | SKI | MAM | EYE]

INVENTORY AND SCREENING NOTES:

*Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition...

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

Material (g/l): 0 Regulatory (g/l): 0
Does the product contain exempt VOCs: No
Are colorants available that do not increase the VOC content of the base paint when tinted: N/A

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: CDPH Standard Method V1.1 (Section 01350/CHPS) - Zero VOC emissions
VOC content: SCAQMD Rule 1113 Architectural Coatings - Fire Proofing Exterior Coatings, Fire Retardant Coatings, Graphic Arts (Sign) Coatings, High Temperature IM Coatings, Japans/Faux Finishing Coatings, Magnesite Cement Coatings, Roof Primers (Bituminous), Shellac, S LCA: Environmental Product Declaration (EPD) by Sustainable Minds

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.
Pre-checked for LEED v4 Option 2.
Pre-checked for LEED v4.1 Option 1.

Summary table with 3 columns: Third Party Verified?, PREPARER: Self-Prepared, VERIFIER: VERIFICATION #: SCREENING DATE: 2024-08-05, PUBLISHED DATE: 2024-08-06, EXPIRY DATE: 2027-08-05

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

SOUTHWEST TYPE 5GP

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No

RESIDUALS AND IMPURITIES NOTES: Southwest Type 5GP has no known residual and impurities.

OTHER PRODUCT NOTES:

CALCIUM SULFATE HEMIHYDRATE

ID: 10034-76-1

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-08-05 6:52:02**

%: **55.0000 - 75.0000**

GreenScreen: **LT-UNK**

RC: **UNK**

NANO: **Unknown**

SUBSTANCE ROLE: **Filler**

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: There are no notes for this substance.

VERMICULITE

ID: 1318-00-9

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-08-05 6:53:42**

%: **25.0000 - 40.0000**

GreenScreen: **NoGS**

RC: **UNK**

NANO: **Unknown**

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: There are no notes for this substance.

PULP, CELLULOSE (PRIMARY CASRN IS 65996-61-4)

ID: 347406-10-4

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-08-05 6:54:13**

#: 2.5000 - 10.0000

GreenScreen: NoGS

RC: UNK

NANO: Unknown

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
EXEMPT	European Union / European Commission (EU EC)	EU - REACH Exemptions Exempted from REACH Annex IV listing due to intrinsic safety

SUBSTANCE NOTES: There are no notes for this substance.

LIMESTONE (PRIMARY CASRN IS 1317-65-3)

ID: 359415-48-8

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-08-05 6:54:55**

#: 1.0000 - 2.5000

GreenScreen: BM-3dg

RC: UNK

NANO: Unknown

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: Unknown if substance has recycled content

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2024-08-05 6:56:36**

#: 0.1000 - 1.0000

GreenScreen: BM-1

RC: UNK

NANO: Unknown

SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen**
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route**
CAN	US NIH - Report on Carcinogens	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	US NIH - Report on Carcinogens	Known to be a human Carcinogen**
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**
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**
GEN	GHS - Japan	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]**
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]**
MAM	GHS - New Zealand	Specific target organ toxicity - repeated exposure category 1**

ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: There are no notes for this substance.

**Form-Specific Hazard: This substance's GreenScreen Benchmark or List Translator score and the applicable hazards are related to particulate inhalation, which is expected to occur only during manufacture, installation, maintenance, or demolition, due to activities such as sawing, sanding, grinding, or intensive cleaning. See HPDC's Special Conditions policy for more information. Manufacturer's Safety Data Sheet (SDS), if applicable, may offer occupational health and safety information.

CALCIUM HYDROXIDE

ID: 1305-62-0

HAZARD DATA SOURCE: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2024-08-05 6:57:16**

%: **0.1000 - 1.0000**

GreenScreen: **LT-P1**

RC: **UNK**

NANO: **Unknown**

SUBSTANCE ROLE: **Buffer**

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 Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products

SUBSTANCE NOTES: There are no notes for this substance.

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

CDPH Standard Method V1.1 (Section 01350/CHPS) - Zero VOC emissions

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL:
<https://carboline.box.com/shared/static/6cl0nio3ct5x60rp7z7c6uienmkj7vne.pdf>

ISSUE DATE: 2019-12-18 00:00:00
EXPIRY DATE:
CERTIFIER OR LAB:
Berkeley Analytical

CERTIFICATION AND COMPLIANCE NOTES:

VOC CONTENT

SCAQMD Rule 1113 Architectural Coatings - Fire Proofing Exterior Coatings, Fire Retardant Coatings, Graphic Arts (Sign) Coatings, High Temperature IM Coatings, Japans/Faux Finishing Coatings, Magnesite Cement Coatings, Roof Primers (Bituminous), Shellac, S

CERTIFYING PARTY: Self-declared
APPLICABLE FACILITIES: All
CERTIFICATE URL:

ISSUE DATE: 2024-08-05 00:00:00
EXPIRY DATE:

CERTIFIER OR LAB: Carboline

CERTIFICATION AND COMPLIANCE NOTES:

LCA

Environmental Product Declaration (EPD) by Sustainable Minds

CERTIFYING PARTY: Third Party
APPLICABLE FACILITIES: All
CERTIFICATE URL:
<https://transparencycatalog.com/company/carboline/showroom/southwest-type-5md>

ISSUE DATE: 2023-02-13 00:00:00
EXPIRY DATE: 2028-02-12 00:00:00
CERTIFIER OR LAB:
Sustainable Minds

CERTIFICATION AND COMPLIANCE NOTES:

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

A gypsum based, Spray-applied Fire Resistive Material (SFRM) designed for the fire protection of interior structural steel. Formulated and applied to meet the minimum bond strength requirements of the IBC Code listed in the "High Rise Building Section" for buildings up to 75' (22.9 m).

MANUFACTURER INFORMATION

MANUFACTURER: **Carboline**
 ADDRESS: **2150 Schuetz Rd**
St. Louis, MISSOURI 63026
 COUNTRY: **United States**

WEBSITE: **www.carboline.com**
 CONTACT NAME: **Jamie Valdez**
 TITLE: **Global Product Support Specialist**
 PHONE: **314.644.1000**
 EMAIL: **sustainability@carboline.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 HPD and

