# CarbonKind™ Concrete Masonry Unit (CMU) - Medium Weight (White) by Angelus Block Co., Inc.

**Health Product** Declaration v2.3

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 327415742464 CLASSIFICATION: 04 22 00 Concrete Unit Masonry

PRODUCT DESCRIPTION: Angelus Block is the prominent producer of concrete masonry units (CMU), interlocking concrete pavers, permeable pavers, decorative site wall units, and segmental planter wall units in California. We are fully committed to advancing our products in support of sustainability goals, including reduced greenhouse gas emissions. By incorporating Portland-limestone cement (PLC) in place of higher-GHG ordinary Portland cement, CarbonKind by Angelus Block achieves the largest CO2 reductions for CMU in the Southern California region. CarbonKind fully meets ASTM C90 and is available in all Angelus-produced CMU without a cost premium. This HPD covers CarbonKind Medium Weight White CMU in Precision, Split Face, Burnished, and Shotblast textures. Units are available in multiple widths and heights.

# Section 1: Summary

### **Nested Method / Material Threshold**

#### **CONTENT INVENTORY**

#### **Inventory Reporting Format**

- Nested Materials Method
- Basic Method

#### **Threshold Disclosed Per**

- Material
- C Product

#### **Threshold Level**

- C 1,000 ppm
- C Per GHS SDS
- Other

# Residuals/Impurities Evaluation

Completed in 1 of 1 Materials

Explanation(s) provided for Residuals/Impurities?

Yes ○ No

For all contents above the threshold, the manufacturer has:

Characterized

Yes ○ No.

Provided weight and role.

Screened

Yes ○ No

Provided screening results using HPDC-approved methods.

Identified Ves ○ 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.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR **IMPURITY** 

GREENSCREEN SCORE | HAZARD TYPE

CONCRETE MASONRY UNIT (CMU) - MEDIUM WEIGHT (WHITE) [ LIMESTONE BM-3dg PUMICE LT-UNK PORTLAND LIMESTONE CEMENT LT-P1 | CAN | END | MAM QUARTZ BM-1 \* | CAN | MAM | GEN GYPSUM BM-3dg | MAM SODIUM DODECYLBENZENESULFONATE LT-P1 | MUL | MAM | SKI | EYE | AQU ]

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

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

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 100 parts per million (ppm) in the finished product, along with the role and percent weight.

\*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. For this reason, this score is intentionally omitted from the "Contents highest concern" line above. See HPDC's Special Conditions policy for more information.

#### **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: Inherently non-emitting source per LEED LCA: Environmental Product Declaration (EPD) by ASTM

#### **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.

Third Party Verified?

Yes

PREPARER: Self-Prepared

VERIFIER:

SCREENING DATE: 2024-07-16 PUBLISHED DATE: 2024-07-16

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# 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

# CONCRETE MASONRY UNIT (CMU) - MEDIUM WEIGHT (WHITE)

%: 100.0000 - 100.0000

MATERIAL THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION

MATERIAL TYPE: Geologically

COMPLETED: Yes

Derived Material

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 information provided in supplier documentation and as predicted by process chemistry (Pharos CML). As Pharos CML lists component substances of Portland cement and various geological materials as "Known or Potential Residuals", these components have been included in the relevant Substance Notes instead of as individual content entries.

OTHER MATERIAL NOTES: Percent by weight of substances reported as ranges in order to account for potential variations during manufacturing.

LIMESTONE ID: 1317-65-3 HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2024-07-16 13:03:04 %: 73.0000 - 80.0000 GreenScreen: BM-3dg 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** None found No listings found on Additional Hazard Lists

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

| PUMICE               |                                       |          |                 | ID: <b>1332-09-8</b>                      |
|----------------------|---------------------------------------|----------|-----------------|---|
| HAZARD DATA SOURCE:  | Pharos Chemical and Materials Library |          | HAZARD SO       | CREENING DATE: 2024-07-16 13:03:04        |
| %: 10.0000 - 12.0000 | GreenScreen: LT-UNK                   | RC: None | NANO: <b>No</b> | SUBSTANCE ROLE: Filler                    |
| HAZARD TYPE          | LIST NAME AND SOURCE                  |          | WARNINGS        |   |
| None found           |                                       |          | No warn         | nings found on HPD Priority Hazard Lists  |
| ADDITIONAL LISTINGS  | LIST NAME AND SOURCE                  |          | NOTIFICATION    |   |
| None found           |                                       |          | No              | listings found on Additional Hazard Lists |
| SUBSTANCE NOTES:     |                                       |          |                 |   |

| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                            | HAZARD SCREENING DATE: 2024-07-16 13:03:04 |                 |   |  |  |
|---|----------------------------|--|-----------------|---|--|--|
| %: 10.0000 - 12.0000                                      | GreenScreen: LT-P1         | RC: None                                   | NANO: <b>No</b> | SUBSTANCE ROLE: Binder  |  |  |
| HAZARD TYPE   | LIST NAME AND SOURCE       |  | WARNINGS        |   |  |  |
| CAN   | MAK                        | MAK  |                 | Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification  |  |  |
| END   | TEDX - Potential Endocrine | TEDX - Potential Endocrine Disruptors      |                 | Potential Endocrine Disruptor   |  |  |
| MAM   | GHS - Japan                | GHS - Japan                                |                 | H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]   |  |  |
| МАМ   | GHS - Japan                | 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: Supplier mill test reports give the following chemical specification of the Portland Limestone Cement (ASTM C595 Type IL) used in this product: max 64% Calcium Oxide [1305-78-8]; max 20% Silicon Dioxide [7631-86-9]; max 6.0% Aluminum Oxide [1344-28-1]; max 1.5% Iron III Oxide [1309-37-1]; max 3.6% Sulfur Trioxide [7446-11-9]; max 2.3% Magnesium Oxide [1309-48-4]. A Type III Environmental Product Declaration (EPD) is available from each of our Portland Limestone Cement suppliers.

| QUARTZ              |                                      |          |                 | ID: <b>14808-60-</b>                 |
|---------------------|--------------------------------------|----------|-----------------|--------------------------------------|
| HAZARD DATA SOURCE: | Pharos Chemical and Materials Librar | у        | HAZARI          | D SCREENING DATE: 2024-07-16 13:03:0 |
| %: 0.5000 - 2.0000  | GreenScreen: BM-1                    | RC: None | NANO: <b>No</b> | SUBSTANCE ROLE: Impurity/Residual    |

| 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: Potential impurity of various geological materials.

GYPSUM

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2024-07-16 13:03:05

\*\*SOURCE: Processing regulator\*\*

<sup>\*\*</sup>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.

| 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  |

 ${\tt SUBSTANCE\ NOTES: Green Screen\ Benchmark @\ assessment\ score\ of\ BM-3dg\ was\ provided\ by\ the\ HPD\ Builder\ Tool.}$ 

#### SODIUM DODECYLBENZENESULFONATE

ID: 25155-30-0

| HAZARD DATA SOURCE: Pharos Chemical and Materials Library |                                   | HAZARD SCREENING DATE: 2024-07-16 13:03:04  |   |   |  |  |
|---|-----------------------------------|---|---|---|--|--|
| %: 0.0000 - 0.0200  | GreenScreen: LT-P1                | RC: None                                    | NANO: <b>No</b>   | SUBSTANCE ROLE: Plasticizer   |  |  |
| HAZARD TYPE   | LIST NAME AND SOURCE              | E   | WARNINGS  |   |  |  |
| MUL   | German FEA - Substances<br>Waters | German FEA - Substances Hazardous to Waters |   | Class 3 - Severe Hazard to Waters   |  |  |
| MAM   | GHS - Japan                       | GHS - Japan                                 |   | H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3] |  |  |
| SKI   | GHS - New Zealand                 | GHS - New Zealand                           |   | Skin irritation category 2  |  |  |
| SKI   | GHS - Australia                   |   | H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]                        |   |  |  |
| EYE   | GHS - New Zealand                 | GHS - New Zealand                           |   | Serious eye damage category 1   |  |  |
| SKI   | GHS - Japan                       |   | H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]                      |   |  |  |
| AQU   | GHS - New Zealand                 | GHS - New Zealand                           |   | Hazardous to the aquatic environment - acute category 1   |  |  |
| AQU   | GHS - New Zealand                 |   | Hazardous to the aquatic environment - chronic category 2                                     |   |  |  |
| AQU   | GHS - Japan                       |   | H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1] |   |  |  |
| EYE   | GHS - Japan                       |   | H319 - Causes serious eye irritation [Serious eye damage eye irritation - Category 2A]        |   |  |  |
| EYE   | GHS - Australia                   |   | H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]             |   |  |  |
| ADDITIONAL LISTINGS                                       | LIST NAME AND SOURCE              | E   | NOTIFICATION  |   |  |  |
| None found  |                                   |   | N   | o listings found on Additional Hazard Lists   |  |  |

SUBSTANCE NOTES: The admixture containing this substance is not used in all plant formulations. Contact manufacturer if more information is required.

# 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**

#### Inherently non-emitting source per LEED

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2024-07-09 00:00:00

CERTIFIER OR LAB: None

CERTIFIER OR LAB: ASTM

International

APPLICABLE FACILITIES: Fontana, CA 92335; Bakersfield, EXPIRY DATE:

CA 93307; Gardena, CA 90248; Indio, CA 92202; Orange, CA 92865; Oxnard, CA 93036; Sun Valley, CA 91352

**CERTIFICATE URL:** 

CERTIFICATION AND COMPLIANCE NOTES:

# **Environmental Product Declaration (EPD) by ASTM**

ISSUE DATE: 2023-08-09 00:00:00

EXPIRY DATE: 2028-08-09 00:00:00

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: Gardena, CA 90248; Indio, CA

92202; Orange, CA 92865; Oxnard, CA 93036; Sun Valley,

CA 91352

**LCA** 

**CERTIFICATE URL:** 

https://www.angelusblock.com/sustainable\_design/epd-

index.cfm

CERTIFICATION AND COMPLIANCE NOTES: Product-specific Type III environmental product declarations (EPD) are available by product mix and manufacturing location. Reference PCR: Part B: Concrete Masonry and Segmental Concrete Paving Product EPD Requirements, November 11 2020. V1.0. Declared Unit: One cubic meter (m3) of concrete formed into manufactured concrete products. Scope: Cradle to Gate.

# 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.

#### **SPEC MIX® IWR PREBLENDED MORTAR**

MANUFACTURER (OR GENERIC): Package Pavement - Spec Mix

HPD URL: https://hpdrepository.hpd-collaborative.org/repository/HPDs/256\_SPEC\_MIX\_TYPE\_S\_MORTAR\_w\_IWR.pdf

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Use for installation of concrete masonry units where an integral water repellent is desired.

#### **SPEC MIX® PREBLENDED MORTAR**

MANUFACTURER (OR GENERIC): Package Pavement - Spec Mix

HPD URL: No HPD available

ACCESSORY TYPE: Installation Accessory

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Used for installation of concrete masonry units.

### Section 5: General Notes

#### **MANUFACTURER INFORMATION**

MANUFACTURER: Angelus Block Co., Inc.

ADDRESS: 11374 Tuxford Street

Sun Valley, CA 91352 COUNTRY: USA WEBSITE: www.AngelusBlock.com

CONTACT NAME: Rich D'Sa
TITLE: Technical Sales Manager

PHONE: **714-637-8594** 

EMAIL: rdsa@angelusblock.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

**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 HPD and

