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

Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 25455

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. Angelus Block is committed to advancing its products in support of sustainability goals, and green rating system value. In addition to our collection of HPDs, we were the first to publish a Type III EPD based on North America's first PCR for concrete masonry products. This HPD covers Medium Weight white cmu in Precision, Split Face, Burnished, and Shotblast textures. Units are available in multiple widths and heights.



Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

C Nested Materials Method

Basic Method

Threshold Disclosed Per

Material

Product

Threshold level

© 100 ppm

C 1,000 ppm

C Per GHS SDS

C Other

Residuals/Impurities

Considered

Partially Considered

Not Considered

Explanation(s) provided for Residuals/Impurities?

Yes ○ No

All Substances Above the Threshold Indicated Are:

Characterized

% weight and role provided for all substances. Screened ○ Yes Ex/SC ⊙ Yes ○ No

All substances screened using Priority Hazard Lists with

results disclosed

Identified ○ Yes Ex/SC ⊙ Yes ○ No

All substances disclosed by Name (Specific or Generic) and 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.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY

GREENSCREEN SCORE | HAZARD TYPE

CONCRETE MASONRY UNIT (CMU) - MEDIUM WEIGHT (WHITE) [LIMESTONE LT-UNK PORTLAND CEMENT LT-P1 | CAN | END PUMICE LT-UNK SODIUM DODECYLBENZENESULFONATE LT-P1 | MUL SILICON DIOXIDE BM-1 | CAN]

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

Contents highest concern GreenScreen Benchmark or List translator Score ... BM-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.2, 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.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional

VOC emissions: Inherently non-emitting source per LEED® LCA: Environmental Product Declaration (EPD) by ASTM

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients Option 1

Third Party Verified?

O Yes No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2021-07-20 PUBLISHED DATE: 2021-07-20

EXPIRY DATE: 2024-07-20

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

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

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals and Impurities were considered by following the suggestions of Emerging Best Practices. 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. The typical composition for each of these entries is disclosed as per supplier documentation when available; otherwise, information is from Pharos CML. Components are listed by name, CASRN, percent by weight, and relevant GreenScreen score.

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

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2021-07-20 8:44:57
%: 70.0000 - 80.0000 GS: LT-UNK RC: None NANO: No SUBSTANCE ROLE: Filler
HAZARD TYPE AGENCY AND LIST TITLES WARNINGS

None found No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).

PORTLAND CEMENT ID: 65997-15-1

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZA	HAZARD SCREENING DATE: 2021-07-20 8:44:57			
%: 10.0000 - 15.0000	GS: LT-P1	RC: N	lone	NANO: No	SUBSTANCE ROLE: Binder	
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS			
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effect but not sufficient for classification			•	
END	TEDX - Potential Endocrine Disruptors		Potential Endocrine Disruptor			

SUBSTANCE NOTES: NIST lists the composition of Portland Cement as including: Calcium Oxide (64%) [1305-78-8; LT-P1 | NO]; Silicon Dioxide (20%) [7631-86-9; LT-P1 | CAN]; Aluminum Oxide (5%) [1344-28-1; BM-2 | RES]; Iron III Oxide (4%) [1309-37-1; BM-2 | CAN]; Sulfur Trioxide (3%) [7446-11-9; LT-P1 | MAM]; and Magnesium Oxide (1%) [1309-48-4; LT-UNK | CAN]. Supplier documentation also includes the following components: 0-15% Limestone [1317-65-3; LT-UNK | NO]; 5-7% Gypsum [13397-24-5; LT-UNK | NO]; 0-0.3% Quartz [14808-60-7; LT-1 | CAN]. Supplier SDS states: "Trace Elements: Portland cement is made from materials mined from the earth and is processed using energy provided by fuels. Trace amounts of naturally occurring, potentially harmful chemicals might be detected during chemical analysis. For example, Portland cement may contain up to 1.50% insoluble residue, some of which may be free crystalline silica. Other trace constituents may include calcium oxide, free magnesium oxide, potassium and sodium sulfate compounds, and trace metal compounds." A Type III Environmental Product Declaration (EPD) is available for the Portland Cement used in this product.

PUMICE ID: 1332-09-8

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCF	REENING DATE:	2021-07-20 8:44:58	
%: 10.0000 - 15.0000	GS: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Filler	
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS			
None found No warnings found on HPD Priority Hazard Lists					

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).

SODIUM DODECYLBENZENESULFONATE

ID: 25155-30-0

HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2021-07-20 8:44:58			
%: 0.0100 - 0.0200	GS: LT-P1	RC: Nor	RC: None NANO: No		SUBSTANCE ROLE: Plasticizer
HAZARD TYPE	AGENCY AND LIST TITLES	W	ARNI	NGS	
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters		

SUBSTANCE NOTES: Admixture. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).

SILICON DIOXIDE				ID: 7631-86-9	
HAZARD SCREENING METHOD:	Pharos Chemical and Materials Library	HAZARD SC	REENING DATE:	2021-07-20 8:44:59	
%: 0.0000 - 0.1000	GS: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Impurity	
HAZARD TYPE	AGENCY AND LIST TITLES	WARN	IINGS		
CAN	GHS - Australia	H350i	H350i - May cause cancer by inhalation		
CAN	GHS - Japan	Carcin	Carcinogenicity - Category 1A [H350]		

SUBSTANCE NOTES: Possible impurity of pumice, as per Pharos CML. GreenScreen Benchmark® assessment score of BM-1 was provided by the HPD Builder Tool. Identified on the US EPA Safer Chemical Ingredient List (Green Circle - Verified Low Concern).



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 APPLICABLE FACILITIES: All

ISSUE DATE: 2021-06- EXPIRY DATE:

CERTIFIER OR LAB: N/A

CERTIFIER OR LAB: ASTM

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: This product qualifies as an inherently non-emitting source per LEED. As per LEED, "Products that are inherently nonemitting sources of VOCs (stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, and unfinished or untreated solid wood) are considered fully compliant without any VOC emissions testing if they do not include integral organic-based surface coatings, binders, or sealants."

LCA

Environmental Product Declaration (EPD) by ASTM

05-04

ISSUE DATE: 2021-05- EXPIRY DATE: 2026-

CERTIFYING PARTY: Third Party

APPLICABLE FACILITIES: Tuxford Plant (Sun Valley, CA 91352); Orange Plant (Orange, CA 92865); Fontana Plant (Fontana, CA 92335); Gardena Plant (Gardena, CA 90248); Oxnard Plant (Oxnard, CA 93036); Indio Plant (Indio, CA 92202).

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® PREBLENDED MORTAR

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Use for installation of concrete masonry units.

SPEC MIX® IWR PREBLENDED MORTAR

HPD URL: No HPD available

HPD URL: No HPD available

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Use for installation of concrete masonry units where an integral water repellent is desired.



Section 5: General Notes

MANUFACTURER INFORMATION

MANUFACTURER: Angelus Block Co., Inc.

ADDRESS: 11374 Tuxford Street Sun Valley CA 91352, USA

WEBSITE: www.AngelusBlock.com

CONTACT NAME: John Surratt TITLE: Architectural Sales Manager

PHONE: 714-637-8594

EMAIL: jsurratt@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 (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping

to a LT-1 or LTP1 score.)

NoGS No GreenScreen.

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 for compliance with the HPD standard noted.