KAUFMAN **Duracrete II**

Health Product Declaration v2.3 CLASSIFICATION: 03 01 30 Maintenance of Cast-in-Place Concrete HPD UNIOUE IDENTIFIER: 49633704960

Product Description

Duracrete II is a medium gray, very rapid setting, cementitious repair mortar that is designed to be used in horizontal applications from ½" up to full-depth when extended. Duracrete II contains special anti-corrosion admixtures to prevent corrosion of rebar.





Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting

Format Nested Materials Method

C Basic Method

Threshold Disclosed Per

Material

Product

Threshold Level

C 1,000 ppm C Per GHS SDS

Other

Residuals/Impurities Evaluation

Completed in 5 of 5 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 ⊙ 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.

NESTED MATERIAL | MATERIAL OR SUBSTANCE | RESIDUAL OR **IMPLIRITY**

GREENSCREEN SCORE | HAZARD TYPE

SAND [QUARTZ BM-1* | CAN | MAM | GEN] CEMENT [PORTLAND CEMENT LT-P1 | CAN | END | MAM] SLAG [BLAST FURNACE SLAG LT-UNK | BINDER [HIGH-ALUMINA CEMENT LT-UNK | ADDITIVE [PHOSPHOGYPSUM BM-3dg | MAM]

Number of Greenscreen BM-4/BM3 contents ... 1

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 HPD was produced using primary information from the manufacturer, including CAS numbers and SDS when needed. The manufacturer has made every effort to report the substances in this product to the listed threshold. This is a voluntary, self-reported effort. Any errors or omissions shall be considered a human error and therefore reported to the manufacturer. The manufacturer shall not be liable for omissions. The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD.

*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

VOC emissions: Inherently non-emitting source per LEED VOC content: MAS Certified Green - VOC Content

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

O Yes

PREPARER: Self-Prepared

VERIFIER:

SCREENING DATE: 2023-12-01 PUBLISHED DATE: 2023-12-15

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

SAND	%: 60.0000 - 70.0000		
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material	

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold

OTHER MATERIAL NOTES: Percentages > 10% are used to disguise the formula covered as intellectual property.

QUARTZ

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-12-04 12:18:48

%: 99.0000

GreenScreen: BM-1

RC: None

NANO: No

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: Per Pharos database: "Only a few elements can replace silicon in the quartz lattice (substitutional positions) or are small enough to occupy free spaces in the lattice (interstitial positions). In natural quartz crystals, the most common ones to replace Si are Al, Fe, Ge, and Ti, whereas Li, Na, Ca, Mg and Fe often occupy interstitial positions in the "c-channels"." [Mindat]

CEMENT %: 8	%: 8.0000 - 16.0000		
PRODUCT THRESHOLD: 100 RES		MATERIAL TYPE: Geologically Derived Material	

^{**}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.

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold

OTHER MATERIAL NOTES: Portland Cement is made from materials mined from the earth, and may contain up to 0.75% insoluble residue, some of which may be free crystalline silica. Other trace Constituents may include free calcium oxide (also known as quick lime) and Chromium and Nickel may be at levels below 0.02%. (Continental Cement Company MSDS)

PORTLAND CEMENT	PORTLAND CEMENT ID: 65997-15-1					
HAZARD DATA SOURCE: Pha	AZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-12-04 12:19:33			
%: 95.0000 - 99.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE F	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	Disruptors	Potential Endocrin	ne Disruptor		
MAM	GHS - Japan	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
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 lis	stings found on Ado	ditional Hazard Lists	

SUBSTANCE NOTES: No residuals or impurities are expected to be present at or above 100 ppm.

SLAG %: 7.0000 - 15.0000

PRODUCT THRESHOLD: 100 RESIDUALS AND IMPURITIES EVALUATION COMPLETED: MATERIAL TYPE: Other: Industrial by-

ppm Yes product/waste

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold

OTHER MATERIAL NOTES: "Blast furnace slag is a nonmetallic coproduct produced in the process [of iron production]. It consists primarily of silicates, aluminosilicates, and calcium-alumina-silicates." (Federal Highway Administration)-Per Pharos database

BLAST FURNACE SLAG ID: 65996-69-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-12-04 12:23:15 %: 99,0000 GreenScreen: LT-UNK RC: PreC SUBSTANCE ROLE: Filler NANO: No HAZARD TYPE LIST NAME AND SOURCE WARNINGS No warnings found on HPD Priority Hazard Lists None found ADDITIONAL LISTINGS LIST NAME AND SOURCE **NOTIFICATION** No listings found on Additional Hazard Lists None found

SUBSTANCE NOTES: Ground Granulated Blast Furnace Slag is a byproduct of iron blast furnaces. Slag is a supplementary cementitious material (SCM), and is considered a pre-consumer waste product under the LEED program.

BINDER %: 5.0000 - 12.0000

PRODUCT THRESHOLD: 100 RESIDUALS AND IMPURITIES EVALUATION COMPLETED: MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold

OTHER MATERIAL NOTES: Per Pharos database: TSCA Definition 2008: High-Alumina cement is a mixture of chemical substances produced by burning or sintering at high temperature (greater than 1200.degree.C (2192.degree.F)) raw materials which are predominantly calcium carbonate, aluminum oxide, silica, and iron oxide.

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-12-04 12:21:46

%: 100.0000 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: No residuals or impurities at or above 100 ppm.

ADDITIVE %: 1.0000 - 4.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED:

MATERIAL TYPE: Geologically Derived

Material

RESIDUALS AND IMPURITIES NOTES: Impurities listed above the threshold are noted in this HPD by Quartz or Pharos databases. Residuals and impurities are considered following the HPD Best Practice Guidance, 10.02.17, version 1 "The threshold applied to Residuals and Impurities (R/I) is the same as that applied to intentionally added substances, i.e., 100 ppm or 1000 ppm. Residuals and impurities below the declared Inventory Threshold do not need to be reported on the HPD." This includes average data declared in the common product database or peer-reviewed scientific articles. For this product, no actual material has been tested. Therefore, residuals and impurities are for informational purposes only and are not a guarantee of presence in the actual building material. Pharos and PubChem (formerly TOXNET) are the main databases for researching potential residuals and impurities. Any R/I above the threshold shall be listed on the HPD; otherwise, if none are listed, then no residuals or impurities are common in that substance above the threshold

OTHER MATERIAL NOTES:

PHOSPHOGYPSUM ID: 13397-24-5					
HAZARD DATA SOURCE: Ph	HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2023-12-04 12:21:03		
%: 100.0000 Gre	enScreen: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Binder	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
МАМ	GHS - Japan		•	respiratory irritation [Specific target ngle exposure - Category 3]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found		No listings found on Additional Hazard Lists			

SUBSTANCE NOTES: Some of the various types of byproduct gypsum are flue-gas desulfurization (FGD) gypsum, fluorogypsum, citrogypsum, phosphogypsum, and titanogypsum.

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: 2023-12-05

CERTIFIER OR LAB: None

APPLICABLE FACILITIES: 3811 Curtis Avenue, Baltimore,

MD

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: Per the LEED v4.1, concrete is a non-emitting source. No VOC emission testing is necessary.

EXPIRY DATE:

VOC CONTENT

MAS Certified Green - VOC Content

CERTIFYING PARTY: Self-declared

ISSUE DATE: 2023-12-09

CERTIFIER OR LAB:

APPLICABLE FACILITIES: 3811 Curtis Avenue, Baltimore,

EXPIRY DATE:

kaufmanproducts

MD

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: This is not MAS Green certification. The VOC content has been self-declared, utilizing the selfcalculation method outlined by the United States Environmental Protection Agency (US EPA) and the South Coast Air Quality Management District (SCAQMD).

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

Advantages

Shrinkage compensated. Single component-just add water.

Rapid hardening- open to traffic in just 2 hours (at 75oF).

It's water resistant after its initial set.

Excellent resistance to de-icing salts and sulfates.

Hard wearing surface.

Packaging & Yield

50 lb. polyethylene lined bags yields approximately .46 cubic feet.

When 1 bag is combined with 30# of proper aggregate, the yield increases to ~.72 ft3

Shelf Life

12 months from manufacture date, when stored unopened under recommended conditions.

Store between 40 and 85°F at low humidity.

MANUFACTURER INFORMATION

MANUFACTURER: Kaufman Products, Inc.

ADDRESS: 3811 Curtis Avenue
Baltimore, Maryland 21226

COUNTRY: United States of America

WEBSITE: kaufmanproducts.net CONTACT NAME: Alex Kaufman

TITLE: President PHONE: 4103548600

EMAIL: akaufman@kaufmanproducts.net

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