

HPD UNIQUE IDENTIFIER: 99273935872

CLASSIFICATION: 09 30 13 Ceramic Tiling

PRODUCT DESCRIPTION: The ceramic tile covered in this HPD includes: A04RALIC-LGY.M0U, A14RZBVA-WH0.G0R, A14RZMPL-MGY.M0R, A06RZNDA-LBE.G0R, A06RZCIR-IV0.G0R, A26RZPKW-GY0.M0U, A26RZLND-GY0.MPU, A06RZTIS-IV0.G0R, A07R730-GY0.M0U, A04RPREM-IV0.M0U The sustainable and high-performance ceramic tiles are manufactured with up to 25% recycled materials from waste generated during the manufacturing process.

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format	Threshold Level	Residuals/Impurities Evaluation	For all contents above the threshold, the manufacturer has:
☒ Nested Materials Method	☒ 100 ppm	Completed in 8 of 8 Materials	Characterized ☒ Yes ☐ No
☐ Basic Method	☐ 1,000 ppm	Explanation(s) provided for Residuals/Impurities?	<i>Provided weight and role.</i>
Threshold Disclosed Per	☐ Per GHS SDS	☒ Yes ☐ No	Screened ☒ Yes ☐ No
☐ Material	☐ Other		<i>Provided screening results using HPDC-approved methods.</i>
☒ Product			Identified ☒ Yes ☐ No
			<i>Provided name and CAS RN or other identifier.</i>

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

CLAY [KAOLIN LT-UNK] CAN QUARTZ BM-1* | CAN | MAM | GEN]

RECOVERED SCRAP [CERAMIC SCRAP] RED CLAY [RED SHALE CLAY] BODY COMPONENT 2 [QUARTZ BM-1*] CAN | MAM | GEN]

ETP SLUDGE [ETP SLUDGE] BODY COMPONENT 1 [LIMESTONE BM-3dg QUARTZ BM-1*] CAN | MAM | GEN] PIGMENT [C.I. PIGMENT RED 231 LT-UNK] NATURAL CLAY [BENTONITE LT-UNK QUARTZ BM-1*] CAN | MAM | GEN]

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

Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... None

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Special Conditions applied: [MixedRecycledContent]

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.

*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: CDPH Standard Method V1.2 (Section 01350/CHPS) - Classroom & Office scenario

VOC emissions: RFCI FloorScore

: SCS Recycled Content Certification - Recycling Programs

BS EN ISO 10545-15:1997 with ICP-OES (Lead & Cadmium): Metal Release Analysis

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

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

CLAY		%: 55.0000 - 60.0000	
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material	
RESIDUALS AND IMPURITIES NOTES: 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 are shown in range due to the variable composition of naturally occurring minerals.			

KAOLIN				ID: 1332-58-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-11-22 8:13:03	
%: 95.0000 - 99.0000	GreenScreen: LT-UNK	RC: UNK	NANO: No	SUBSTANCE ROLE: Ceramic body
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: To complete this HPD peer-reviewed quality data has been used to fill in the gaps. According to the SDS, there are no substances listed as hazardous in the material or actual formulation has been covered to protect confidentiality. The Clay Minerals Society (SDS) and Pharos databases have been used for primary information. The actual product may or may not contain this chemical.				

QUARTZ					ID: 14808-60-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-11-22 8:13:04		
%: 0.0000 - 4.0000	GreenScreen: BM-1	RC: None	NANO: No	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: Kaolin is a naturally occurring mineral, which may contain amounts of crystalline silica typically 0.1-4%. (Edgar MSDS)-Per Pharos Database.

**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.

RECOVERED SCRAP	%: 10.0000 - 16.0000	
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No	MATERIAL TYPE: Other: Recovered Scrap/ Ceramic waste
RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered for this material.		

OTHER MATERIAL NOTES: It consists of 100% Pre-consumer ceramic waste refers to discarded or unused ceramic materials generated during the manufacturing process. This type of waste includes imperfect or rejected ceramic items, greenware (unfired ceramic pieces), crushed fired tiles, polishing sludge, excess raw materials, and other by-products produced in the various stages of ceramic production.

CERAMIC SCRAPID: Mixed Recycled Content

HAZARD DATA SOURCE: HPDC Special Conditions Policy

%: 100.0000

GreenScreen: Not Required

RC: PreC

NANO: No

MATERIAL ROLE: Ceramic body

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening is not applicable to this Special Condition

INGREDIENT DESCRIPTION: The composition of this scrap or recycled material is mainly composed of Clay; a main raw-material in the Ceramic tile production.

ANALYTICAL TESTING: For this product, no actual material has been tested. The manufacturer has made every effort to report the all contents of this material. This is a voluntary, self-reported effort.

BATCH VARIATION: Yes, A batch variation may arise as a result of variable product thickness, different models, types or due to color selection.

COUNTRY OF ORIGIN:

MATERIAL CONTENT NOTES: It consists of 100% Pre-Consumer materials, generated during the manufacturing process. This material, may consist of off-cuts, greenware (unfired ceramic pieces), rejected pieces, crushed fired tiles, polishing sludge, ceramic powder, or excess glaze. Utilizing waste and recovered materials can help to minimize raw material acquisition expenses. In addition, it helps in achieving environmental sustainability goals. This is consistent with reducing environmental impacts.

“This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.”

This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.

RED CLAY%: 6.0000 - 8.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: 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:

HAZARD DATA SOURCE: HPDC Special Conditions Policy

%: 100.0000GreenScreen: Not RequiredRC: UNKNANO: NoMATERIAL ROLE: Ceramic body

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening is not applicable to this Special Condition		

INGREDIENT DESCRIPTION AND COMPOSITION: Per Pharos or Quartz database, common impurities of clay are quartz at 1-2%.

COUNTRY OF ORIGIN: Unknown

RADIOACTIVE ELEMENTS: Unknown

POTENTIAL PRESENCE OF TOXIC METALS: Unknown

MATERIAL CONTENT NOTES: Shales are composed of clay minerals. The Clay minerals are a group of silicate minerals that form by chemical weathering of other silicates. So, shales are composed of clay-sized grains of clay minerals. (flickr)

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.

BODY COMPONENT 2

%: 7.0000

PRODUCT THRESHOLD: 100 ppmRESIDUALS AND IMPURITIES EVALUATION COMPLETED: YesMATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: 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:

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials LibraryHAZARD SCREENING DATE: 2023-11-22 8:13:04

%: 99.0000GreenScreen: BM-1RC: UNKNANO: NoSUBSTANCE ROLE: Ceramic body

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: "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]-Per the Pharos Database

**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.

ETP SLUDGE	%: 1.0000 - 6.0000	
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: No	MATERIAL TYPE: Other: Industrial Waste/ by-product
RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are considered for this material.		

OTHER MATERIAL NOTES: This material is 100% Pre-Consumer/ Industrial by-product. A semi-solid slurry obtained after the treatment of effluent in the effluent treatment plant (ETP) is known as ETP sludge. Sludge is produced as a by-product of the treatment of industrial wastewater or during sewage treatment.

ETP SLUDGE			ID: Mixed Recycled Content	
HAZARD DATA SOURCE: HPDC Special Conditions Policy				
%: 100.0000	GreenScreen: Not Required	RC: PreC	NANO: No	MATERIAL ROLE: Ceramic body
HAZARD TYPE	AGENCY AND LIST TITLES		WARNINGS	
Hazard Screening is not applicable to this Special Condition				
INGREDIENT DESCRIPTION: Effluent Treatment Plant (ETP) Sludge.				
ANALYTICAL TESTING: For this product, no actual material has been tested. The manufacturer has made every effort to report the all contents of this material. This is a voluntary, self-reported effort.				
BATCH VARIATION: Yes, A batch variation may arise as a result of variable product thickness, different models, types or due to color selection.				
COUNTRY OF ORIGIN:				
MATERIAL CONTENT NOTES: ETP sludge is 100% Pre-Consumer material. Sludge is the semi-solid slurry of waste that settles at the bottom of ETP, that slurry from ETP is known as ETP sludge. Sludge is produced as a by-product of the treatment of industrial wastewater or during sewage treatment.				
This disclosure does not provide information on the potential presence of hazardous.				
This disclosure does not provide information on the potential presence of hazardous substances which may be found in certain mixed recycled materials.				

BODY COMPONENT 1		%: 5.0000
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material
RESIDUALS AND IMPURITIES NOTES: 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:		

LIMESTONE				ID: 1317-65-3
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2023-11-22 8:13:04	
%: 99.0000	GreenScreen: BM-3dg	RC: UNK	NANO: No	SUBSTANCE ROLE: Ceramic body
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: Residuals or impurities are quantitatively measured and noted in this HPD when greater than or equal to 100 ppm.

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-11-22 8:13:04

%: 0.1000 - 1.0000 GreenScreen: BM-1 RC: None NANO: No 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: "Building materials, such as concrete and dimension stone (sandstone, granite, and limestone are examples) contain crystalline silica in the form of quartz." (USGS Crystalline Silica Primer) Limestone typically contains between 0.1% and 1% quartz.-Per Pharos Database.

**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.

PIGMENT

%: 4.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Polymeric Material

RESIDUALS AND IMPURITIES NOTES: 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:

C.I. PIGMENT RED 231

ID: 68186-99-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2023-11-22 8:13:04

%: 99.0000

GreenScreen: LT-UNK

RC: UNK

NANO: No

SUBSTANCE ROLE: Pigment

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: To complete this HPD peer-reviewed quality data or Common Products in the Pharos database have been used to fill in the gaps. The actual product may or may not contain this chemical substance.

NATURAL CLAY

%: 3.0000

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes

MATERIAL TYPE: Geologically Derived Material

RESIDUALS AND IMPURITIES NOTES: 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.

BENTONITE

ID: 1302-78-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-11-22 8:13:04

%: 95.0000 - 99.0000 GreenScreen: LT-UNK RC: UNK NANO: No SUBSTANCE ROLE: Ceramic body

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: Residuals or impurities are quantitatively measured and noted in this HPD when greater than or equal to 100 ppm.

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2023-11-22 8:13:04

%: 0.1000 - 6.0000 GreenScreen: BM-1 RC: None NANO: No 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: Bentonite can contain up to 6% crystalline silica. (Pharos database)

****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.

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 V1.2 (Section 01350/CHPS) - Classroom & Office scenario
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box: 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: Certificate No: 201229-01		ISSUE DATE: 2020-12-30 EXPIRY DATE: CERTIFIER OR LAB: Berkeley Analytical
VOC EMISSIONS		RFCI FloorScore
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: R.A.K. Ceramics P.J.S.C P.O. Box 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: Registration # SCS-FS-02974		ISSUE DATE: 2023-02-01 EXPIRY DATE: CERTIFIER OR LAB: Scientific Certification Systems, Inc.
RECYCLED CONTENT		SCS Recycled Content Certification - Recycling Programs
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box: 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: Certificate No: SCS-RC-08850		ISSUE DATE: 2023-04-05 EXPIRY DATE: CERTIFIER OR LAB: Scientific Certification Systems, Inc.
BS EN ISO 10545-15:1997 WITH ICP-OES (LEAD & CADMIUM)		Metal Release Analysis
CERTIFYING PARTY: Third Party APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box: 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: ICP-OES is a fast elemental analysis method capable of testing large sample batches in a short period of time. With ICP-OES, testing numerous metals, such as aluminum, lead, nickel, titanium, copper, cobalt, stainless steel, and alloy steels, ICP-OES has the ability to detect elements at trace levels.		ISSUE DATE: 2020-02-19 EXPIRY DATE: CERTIFIER OR LAB: Lucideon
RADIOACTIVITY		Radioactivity Test
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box: 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: Doc No: QFTLA46.DOC		ISSUE DATE: 2021-08-16 EXPIRY DATE: CERTIFIER OR LAB: RAK CERAMICS
REGULATORY SPECIFICATIONS		Regulatory Specifications
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box: 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: Doc No: CL/7259/2023. This declaration includes various characteristics and specifications of tiles including dimensions, water absorption, breaking strength, resistance to surface abrasion, low conc. acids and alkalis, stains, thermal shock etc, under the standard test method "BS EN ISO 10545"		ISSUE DATE: 2023-05-15 EXPIRY DATE: CERTIFIER OR LAB: RAK CERAMICS
ANTIMICROBIAL TEST		Antimicrobial

CERTIFYING PARTY: Third Party

ISSUE DATE: 2021-04-07

CERTIFIER OR LAB: Middle East

APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box:

EXPIRY DATE:

Testing Services, L.L.C

4714, Ras Al Khaimah, United Arab Emirates

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: METS-R 1535-01/2021

DT55 – PRE CONSUMER RECYCLE MATERIAL	Recycled Content
CERTIFYING PARTY: Third Party ISSUE DATE: 2023-03-29 CERTIFIER OR LAB: APPLICABLE FACILITIES: RAK Ceramics PJSC P.O. Box: EXPIRY DATE: CERTIQUALITY 4714, Ras Al Khaimah, United Arab Emirates CERTIFICATE URL: CERTIFICATION AND COMPLIANCE NOTES: This certificate compiles with DT 55 ED 02 100915; "technical document for product certification of construction products with the specified percentage of recycled material: ceramic tiles and semi-finished items for the production thereof". Certificate No: 4393	

+ 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

No accessories were added because this must be installed by professional installers who will use their tools and methods. Exact methods are determined by site-specific conditions, therefore, additional tools and products are unknown. For manufacturer-specific installation instructions, please visit the website: www.rakceramics.com

MANUFACTURER INFORMATION

MANUFACTURER: RAK Ceramics
ADDRESS: RAK Ceramics P.J.S.C. P.O. Box 4714, Sheikh Muhammad Bin Salem Rd Al Jazirah Al Hamra, Ras Al-Khaimah Ras Al-Khaimah, Ras Al-Khaimah P.O. Box 4714
COUNTRY: United Arab Emirates

WEBSITE: www.rakceramics.com
CONTACT NAME: Ruel Perez
TITLE: VP-QEHS
PHONE: +971 7 246 7000
EMAIL: ruel.perez@rakceramics.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

