

HPD UNIQUE IDENTIFIER: 8226096128

CLASSIFICATION: 09 30 00 Tiling

PRODUCT DESCRIPTION: High-fired terracotta tile made from a red clay body containing kaolin, illite/mica, quartz, and iron oxides. Handmade and extruded. No glazes or coatings are used.

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 ☐ Basic Method	☒ 100 ppm ☐ 1,000 ppm ☐ Per GHS SDS ☐ Other	Completed in 5 of 5 Materials Explanation(s) provided for Residuals/Impurities? ☒ Yes ☐ No	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.
Threshold Disclosed Per			
☐ Material ☒ Product			

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

IMCO400 CLAY [**KAOLINITE (AL2(OH)4(SI2O5))** **NoGS** **MICA** **LT-UNK**]
MAM **QUARTZ** **BM-1**] CAN | MAM | GEN **SMECTITE** **NoGS** **RUTILE**
TITANIUM DIOXIDE **LT-1**] CAN] **GROG** [**SILICON DIOXIDE** **BM-1**]
CAN | MAM **ALUMINUM OXIDE** **BM-2**] MAM **FERRIC OXIDE** **BM-1**]
CAN | MAM **TITANIUM DIOXIDE** **BM-1**] CAN | END | MAM **POTASSIUM OXIDE** **BM-2** **CALCIUM OXIDE (PRIMARY CASRN IS 1305-78-8)** **BM-2**]
SKI | MAM | EYE **MAGNESIUM OXIDE** **BM-3dg**] CAN | MAM **SODIUM OXIDE** **BM-2**] **C-RED** [**KAOLINITE (AL2(OH)4(SI2O5))** **NoGS** **QUARTZ** **BM-1**]
CAN | MAM | GEN **HAEMATITE** **LT-UNK** **MICA** **LT-1**] CAN]
NEWMAN RED CLAY [**QUARTZ** **BM-1**] CAN | MAM | GEN **ALUMINUM OXIDE** **BM-2**] MAM **QUARTZ** **BM-1**] CAN | MAM | GEN **FERRIC OXIDE** **BM-1**]
CAN | MAM **POTASSIUM OXIDE** **BM-2** **CALCIUM OXIDE (PRIMARY CASRN IS 1305-78-8)** **BM-2**]
SKI | MAM | EYE **MAGNESIUM OXIDE** **BM-3dg**] CAN | MAM **TITANIUM DIOXIDE** **BM-1**] CAN | END |
MAM **SODIUM OXIDE** **BM-2**] **SIGNATURE LOW-FIRED GLAZE (ALL COLORS)** [**FRITS, CHEMICALS** **LT-P1**] MUL **FELDSPAR** **LT-UNK**]
MAM **BARIUM CARBONATE** **BM-2**] MAM **C.I. PIGMENT BLACK 27** **LT-1**]
CAN | RES | GEN **DOLOMITE** **NoGS** **KAOLIN** **LT-UNK**] CAN **ZIRCON (ZR(SIO4))** **BM-2** **ZINC OXIDE** **BM-1**]
END | MUL | AQU | MAM | REP **C.I. PIGMENT BLUE 36** **LT-1**]
CAN | RES | GEN **COBALT(II) CARBONATE** **LT-1**] CAN | REP | MUL | RES | GEN | AQU | MAM | EYE | SKI
TITANIUM DIOXIDE **BM-1 ***] CAN | END | MAM **C.I. PIGMENT BROWN 33** **LT-UNK** **CUPRIC CARBONATE, BASIC** **LT-P1**]
MUL | EYE | AQU **FERRIC OXIDE** **BM-1 ***] CAN | MAM **QUARTZ** **BM-1 ***]
CAN | MAM | GEN **ATTAPULGITE** **LT-1**] CAN | MAM | EYE **VANADIUM ZIRCONIUM YELLOW BADDELEYITE** **LT-P1**] MUL]

Number of Greenscreen BM-4/BM3 contents ... 2
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ...
BM-1, LT-P1, LT-1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:
Antimicrobial Pesticides Reporting: This product does not contain substance(s) that are intentionally added above the [Product - 100 ppm] threshold to act as antimicrobials.

Inventory and screening were completed for all known substances ≥100 ppm using supplier SDSs, formulation records, and HPD Builder hazard screening. Bound mineral powders (e.g., quartz, ferric oxide) were evaluated using Form-Specific Hazard Policies. Proprietary materials below threshold are confirmed to contain no known hazards. This methodology aligns with the broader ARTO product collection for consistency.

*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.

PFAS DETAILS:
This product does **not** contain intentionally added PFAS and materials and substances from suppliers are verified to **not** contain PFAS.
Attestation:

Julie Grajeda
2025-09-04

VOC Content data is not applicable for this product category.

listings.

VOC emissions: Inherently non-emitting source per LEED

VOC emissions: Inherently non-emitting source per LEED

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Option 1.

Pre-checked for LEED v4.1 Option 1.

Third Party Verified?

☐ Yes

☒ No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2025-09-04

PUBLISHED DATE: 2025-09-04

EXPIRY DATE: 2028-09-04

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

IMCO400 CLAY		%: 38.0000 - 39.0000	
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material	
RESIDUALS AND IMPURITIES NOTES: Naturally occurring minerals in clay. Screened by supplier SDS.			
OTHER MATERIAL NOTES: Same base formula as your “No Glaze” body; ranges below are scaled to reflect the presence of the glaze layer (so total product = 100%).			

KAOLINITE (AL2(OH)4(SI2O5))				ID: 1318-74-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:36	
%: 50.0000 - 64.0000	GreenScreen: NoGS	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: Clay mineral that contributes to plasticity and whiteness.				

MICA				ID: 12001-26-2	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:36		
%: 14.0000 - 16.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
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 listings found on Additional Hazard Lists		
SUBSTANCE NOTES: Aluminosilicate that provides workability.					

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:37	
?: 14.0000 - 15.0000	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	

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:37	
?: 1.0000 - 15.0000	GreenScreen: NoGS	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: Clay with swelling properties aiding water retention.		

RUTILE TITANIUM DIOXIDE

ID: 1317-80-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:38		
%: 0.0100 - 2.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	US CDC - Occupational Carcinogens	Occupational Carcinogen		
CAN	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources		
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Cosmetics & Personal Care Products		

SUBSTANCE NOTES: Natural titanium dioxide used as flux and pigment.

GROG		%: 32.0000 - 33.0000
PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Other: Processed Material
RESIDUALS AND IMPURITIES NOTES: Screened at 100 ppm. Contains mineral oxides derived from original clay body; no new chemicals are added after firing.		
OTHER MATERIAL NOTES: Post-consumer recycled ceramic (ground roof tiles). Composition varies by source & firing; sub-components shown may be present at variable levels. Percentages of sub-components are undisclosed due to variability; parent material totals 30.47–31.49% of the product. Trace glaze residues may be present at de minimis levels.		

SILICON DIOXIDE

ID: 7631-86-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:37		
%: 55.0000 - 70.0000	GreenScreen: BM-1	RC: PreC	NANO: No	SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	GHS - Japan	H350 - May cause cancer [Carcinogenicity - Category 1A]
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
MAM	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]
MAM	GHS - Australia	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organ toxicity - repeated exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
SUBSTANCE NOTES: Main structural component; present as quartz and mullite.		

ALUMINUM OXIDE				ID: 1344-28-1
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:38	
%: 15.0000 - 30.0000	GreenScreen: BM-2	RC: PreC	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
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		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products		

SUBSTANCE NOTES: From kaolinitic minerals; retained after firing.

FERRIC OXIDE

ID: 1309-37-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-09-04 8:32:38

%, 3.0000 - 8.0000

GreenScreen: BM-1

RC: PreC

NANO: No

SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists

SUBSTANCE NOTES: Responsible for buff to red coloration; remains stable post-firing.

TITANIUM DIOXIDE

ID: 13463-67-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-09-04 8:32:39

%, 1.0000 - 3.0000

GreenScreen: BM-1

RC: PreC

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	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES: Occurs naturally; provides opacity.

POTASSIUM OXIDE

ID: 12136-45-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2025-09-04 8:32:39

%: 1.0000 - 2.0000

GreenScreen: BM-2

RC: PreC

NANO: No

SUBSTANCE ROLE: Tensile strength additive

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: Natural fluxing agent in fired clays.		

CALCIUM OXIDE (PRIMARY CASRN IS 1305-78-8)

ID: 60873-85-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:39	
%: 0.5000 - 2.0000	GreenScreen: BM-2	RC: PreC	NANO: No	SUBSTANCE ROLE: Tensile strength additive
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
SKI	GHS - Australia		H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]	
MAM	GHS - Japan		H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
SKI	GHS - New Zealand		Skin corrosion category 1C	
EYE	GHS - New Zealand		Serious eye damage category 1	
EYE	GHS - Japan		H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]	
SKI	GHS - Japan		H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]	
EYE	GHS - Australia		H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
			Antimicrobials	
SUBSTANCE NOTES: Mineral flux; remains stable after firing.				

MAGNESIUM OXIDE

ID: 1309-48-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:39	
%: 0.5000 - 2.0000	GreenScreen: BM-3dg	RC: PreC	NANO: No SUBSTANCE ROLE: Tensile strength additive

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Trace component; provides thermal stability.		

SODIUM OXIDE

ID: 1313-59-3

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:40	
%: 0.5000 - 1.5000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Tensile strength additive
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: Trace alkali from feldspathic components.				

C-RED

%: 12.5000 - 13.0000

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material
RESIDUALS AND IMPURITIES NOTES: Minerals naturally occurring; supplier verified.		
OTHER MATERIAL NOTES: Iron-rich red clay mixture that enhances color and body strength.		

KAOLINITE (AL2(OH)4(SI2O5))

ID: 1318-74-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:41		
%: 68.0000	GreenScreen: NoGS	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: Clay mineral that contributes to plasticity and whiteness.

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-09-04 8:32:41

%: 17.0000
 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: Naturally occurring crystalline silica. Screened for respirable fraction.

HAEMATITE

ID: 1317-60-8

HAZARD DATA SOURCE: Pharos Chemical and Materials Library HAZARD SCREENING DATE: 2025-09-04 8:32:40

%: 12.0000 GreenScreen: LT-UNK RC: None 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: Provides deep red color to fired body.		

MICA

ID: 1318-94-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:41		
%: 1.0000 - 5.0000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Binder	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
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		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: Aluminosilicate that provides workability.					

NEWMAN RED CLAY

%: 12.5000 - 13.0000

PRODUCT THRESHOLD: 100 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Geologically Derived Material
RESIDUALS AND IMPURITIES NOTES: Includes natural iron oxide, screened to 100 ppm.		
OTHER MATERIAL NOTES: Iron oxide-rich red clay blend.		

QUARTZ

ID: 14808-60-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:41		
%: 50.0000 - 55.0000		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: Naturally occurring in high percentages. Main structural and refractory component.

ALUMINUM OXIDE

ID: 1344-28-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:42	
%: 15.0000 - 20.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]		
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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022
		Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025
		Children's Toy Products
SUBSTANCE NOTES: Found in kaolinite and other alumino-silicate minerals.		

QUARTZ				ID: 14808-60-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:43	
%: 17.0000	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: Naturally occurring crystalline silica. Screened for respirable fraction.		

FERRIC OXIDE		ID: 1309-37-1		
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:40		
%: 6.0000 - 8.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Responsible for red color. Occurs as a trace oxide in clays.		

POTASSIUM OXIDE				ID: 12136-45-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:41	
%: 2.0000 - 4.0000	GreenScreen: BM-2	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: Fluxing agent from feldspar minerals.				

CALCIUM OXIDE (PRIMARY CASRN IS 1305-78-8)				ID: 60873-85-0
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:42		
%: 0.5000 - 2.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
SKI	GHS - Australia	H315 - Causes skin irritation [Skin corrosion/irritation - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
SKI	GHS - New Zealand	Skin corrosion category 1C
EYE	GHS - New Zealand	Serious eye damage category 1
EYE	GHS - Japan	H318 - Causes serious eye damage [Serious eye damage / eye irritation - Category 1]
SKI	GHS - Japan	H315 - Causes skin irritation [Skin corrosion / irritation - Category 2]
EYE	GHS - Australia	H318 - Causes serious eye damage [Serious eye damage/eye irritation - Category 1]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
SUBSTANCE NOTES: Impurity in clay matrix; no intentional addition.		

MAGNESIUM OXIDE				ID: 1309-48-4
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:42	
%: 0.5000 - 2.0000	GreenScreen: BM-3dg	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels	
MAM	GHS - Japan		H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
None found			No listings found on Additional Hazard Lists	
SUBSTANCE NOTES: Naturally present in trace amounts.				
TITANIUM DIOXIDE				ID: 13463-67-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:43	

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	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products
SUBSTANCE NOTES: Occurs in minor amounts as part of natural clay.		

%: 0.2000 - 1.0000		GreenScreen: BM-2	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: Trace alkali component from feldspathic minerals.					

SIGNATURE LOW-FIRED GLAZE (ALL COLORS)		%: 2.0000 - 6.0000	
PRODUCT THRESHOLD: 100 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Ceramic
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities evaluated to 100 ppm. Proprietary frits/pigments screened where supplier data is available; screening requested for remaining proprietary items.			
OTHER MATERIAL NOTES: Glaze applied at 2–6% of fired product weight. Substances listed as ranges reflect glaze recipe. 0–Max% used for pigments to cover all glaze colors. Proprietary frits/pigments disclosed as proprietary where CAS not available; hazard screening requested from suppliers.			

FRITS, CHEMICALS				ID: 65997-18-4	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:43		
%: 24.0000 - 34.4000		GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Binder
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
MUL	German FEA - Substances Hazardous to Waters		Class 2 - Hazard to Waters		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)		C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
			Electronics (RoHS)		
SUBSTANCE NOTES: UVCB glass mixture; multiple oxide phases. Special Condition: hazards apply to dust only, not bound glaze.					

FELDSPAR				ID: 68476-25-5	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:44		
%: 23.0000 - 31.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Flux	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
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: Naturally occurring mineral; minor quartz may be present.		

BARIUM CARBONATE

ID: 513-77-9

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:45	
%: 10.0000 - 17.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Flux
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MAM	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]	
MAM	GHS - Japan		H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]	
MAM	GHS - Japan		H301 - Toxic if swallowed [Acute Toxicity (oral) - Category 3]	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Biological and Environmentally Released Materials		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Children's Products		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Cosmetics & Personal Care Products		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPH)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
		Children's Toy Products		

C.I. PIGMENT BLACK 27

ID: 68186-97-0

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:46		
%: 0.0000 - 12.4000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization
GEN	MAK	Germ Cell Mutagen 3a
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
SUBSTANCE NOTES: Ceramic Inorganic Color Pigment (CICP). Bound in fired matrix.		

DOLOMITE

ID: 16389-88-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:43	
%: 6.0000 - 9.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Flux
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: Calcium magnesium carbonate flux.				

KAOLIN

ID: 1332-58-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:44	
%: 6.0000 - 9.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Stabilizer
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: Contains residual quartz (14808-60-7) ≤1% of kaolin ingredient.		

ZIRCON ($Zr(SiO_4)$)

ID: 14940-68-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:45	
?: 0.0000 - 6.8000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Opacifier
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: Used as opacifier; inert in fired tile.				

ZINC OXIDE

ID: 1314-13-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:46	
%: 3.0000 - 5.0000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Flux

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MUL	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - acute category 1
AQU	GHS - Japan	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	GHS - Japan	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
AQU	GHS - New Zealand	Hazardous to the aquatic environment - chronic category 1
REP	GHS - Japan	H361 - Suspected of damaging fertility or the unborn child [Toxic to reproduction - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Green Science Policy Institute (GSPI)	GSPI - Six Classes Precautionary List Antimicrobials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
SUBSTANCE NOTES: Substance is a Stable oxide flux.		

%: 0.0000 - 3.2000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man		
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization		
GEN	MAK	Germ Cell Mutagen 3a		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Biological and Environmentally Released Materials		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022		
		Children's Products		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025		
		Children's Toy Products		

COBALT(II) CARBONATE

ID: **513-79-1**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library	HAZARD SCREENING DATE: 2025-09-04 8:32:44			
%: 0.0000 - 2.9000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence		
REP	EU - Annex VI CMRs	Reproductive Toxicity - Category 1B		
MUL	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant		
MUL	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters		
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man		
RES	MAK	Sensitizing Substance Sah - Danger of airway & skin sensitization		
GEN	MAK	Germ Cell Mutagen 3a		
CAN	GHS - Australia	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]		

REP	GHS - Japan	H360 - May damage fertility or the unborn child [Toxic to reproduction - Category 1B]
REP	GHS - Australia	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
GEN	EU - GHS (H-Statements) Annex 6 Table 3-1	H341 - Suspected of causing genetic defects [Germ cell mutagenicity - Category 2]
REP	EU - GHS (H-Statements) Annex 6 Table 3-1	H360F - May damage fertility [Reproductive toxicity - Category 1A or 1B]
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H350i - May cause cancer by inhalation [Carcinogenicity - Category 1A or 1B]
MAM	GHS - Japan	H335 - May cause respiratory irritation [Specific target organ toxicity - Single exposure - Category 3]
EYE	GHS - New Zealand	Eye irritation category 2
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
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
SKI	GHS - New Zealand	Skin sensitisation category 1
REP	GHS - New Zealand	Reproductive toxicity category 2
AQU	GHS - Australia	H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]
GEN	EU - Annex VI CMRs	Mutagen - Category 2
RES	GHS - Japan	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled [Respiratory sensitization - Category 1A]
REP	EU - SVHC List	Toxic to reproduction - Candidate list
REP	EU - SVHC List	Toxic to reproduction - Prioritized for listing
CAN	EU - REACH Annex XVII CMRs	Carcinogens: Category 1B
REP	EU - REACH Annex XVII CMRs	Reproductive toxicants: Category 1B
CAN	EU - SVHC List	Carcinogenic - Candidate list

CAN	EU - SVHC List	Carcinogenic - Prioritized for listing
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Biological and Environmentally Released Materials
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 All Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products
SUBSTANCE NOTES: Decomposes to cobalt oxide in firing.		

TITANIUM DIOXIDE		ID: 13463-67-7	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:45	
%: 0.0000 - 2.9000	GreenScreen: BM-1	RC: None	NANO: No
SUBSTANCE ROLE: Pigment			

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	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources**
CAN	MAK	Carcinogen Group 3A - Evidence of carcinogenic effects but not sufficient to establish MAK/BAT value**
END	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor**
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels**
CAN	IARC	Group 2b - Possibly carcinogenic to humans**
CAN	EU - GHS (H-Statements) Annex 6 Table 3-1	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]**
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
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Children's Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Formulated Consumer Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.0 Product Standard Restricted Substances List (RSL) - Effective July 1, 2022 Cosmetics & Personal Care Products
POSITIVE LIST	US Environmental Protection Agency (US EPA)	US EPA - DfE Safer Chemicals Ingredients list (SCIL) Colorants - Green Circle (Verified Low Concern)
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Cosmetics and Personal Care Products

SUBSTANCE NOTES: Special Condition: hazard only as respirable dust.

****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 DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:46	
%: 0.0000 - 2.7000	GreenScreen: LT-UNK	RC: None	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: Substance is a C1CP spinel pigment.				

CUPRIC CARBONATE, BASIC

ID: 12069-69-1

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:46	
%: 0.0000 - 2.6000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters	
EYE	EU - GHS (H-Statements) Annex 6 Table 3-1		H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]	
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H400 - Very toxic to aquatic life [Hazardous to the aquatic environment (acute) - Category 1]	
AQU	EU - GHS (H-Statements) Annex 6 Table 3-1		H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]	
EYE	GHS - New Zealand		Eye irritation category 2	
EYE	GHS - Australia		H319 - Causes serious eye irritation [Serious eye damage/eye irritation - Category 2A]	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - acute category 1	
AQU	GHS - Australia		H410 - Very toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment (chronic) - Category 1]	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - chronic category 1	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
RESTRICTED LIST	Green Science Policy Institute (GSPI)		GSPI - Six Classes Precautionary List	
			Antimicrobials	
SUBSTANCE NOTES: Converts to copper oxide in firing.				

FERRIC OXIDE

ID: 1309-37-1

%: 0.0000 - 1.5000	GreenScreen: BM-1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification**		
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]**		
MAM	GHS - Japan	H370 - Causes damage to organs [Specific target organs/systemic toxicity following single exposure - Category 1]**		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Common ceramic stain; hazard applies to dust only.

**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.

QUARTZ

ID: **14808-60-7**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:44	
%: 0.0000 - 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: Special Condition: respirable hazard only during cutting/dust exposure.

**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.

ATTAPULGITE				ID: 12174-11-7
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2025-09-04 8:32:45		
%: 0.4000 - 0.6000	GreenScreen: LT-1	RC: None	NANO: No	SUBSTANCE ROLE: Binder

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
CAN	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CAN	IARC	Group 2b - Possibly carcinogenic to humans
CAN	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
CAN	GHS - New Zealand	Carcinogenicity category 2
CAN	GHS - Japan	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
MAM	GHS - Japan	H372 - Causes damage to organs through prolonged or repeated exposure [Specific target organs/systemic toxicity following repeated exposure - Category 1]
EYE	GHS - Japan	H319 - Causes serious eye irritation [Serious eye damage / eye irritation - Category 2A]
CAN	GHS - Australia	H351 - Suspected of causing cancer [Carcinogenicity - Category 2]
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
None found		No listings found on Additional Hazard Lists
SUBSTANCE NOTES: Used in wet glaze slurries; burns off, but included per SDS.		

VANADIUM ZIRCONIUM YELLOW BADDELEYITE					ID: 68187-01-9
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2025-09-04 8:32:46		
%: 0.0000 - 0.1500	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Pigment	
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS		
MUL	German FEA - Substances Hazardous to Waters		Class 3 - Severe Hazard to Waters		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION		
None found			No listings found on Additional Hazard Lists		
SUBSTANCE NOTES: Zircon-based CIGP pigment; inert in fired tile.					

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 manufacturing facilities producing this product (Gardena, CA) CERTIFICATE URL:	ISSUE DATE: 2025-06-19 00:00:00 EXPIRY DATE:	CERTIFIER OR LAB: None
CERTIFICATION AND COMPLIANCE NOTES: High-fired ceramic tile is non-emitting. No testing required.		

VOC EMISSIONS	Inherently non-emitting source per LEED	
CERTIFYING PARTY: Self-declared APPLICABLE FACILITIES: All manufacturing facilities producing this product (Gardena, CA) CERTIFICATE URL:	ISSUE DATE: 2025-09-04 00:00:00 EXPIRY DATE:	CERTIFIER OR LAB: None
CERTIFICATION AND COMPLIANCE NOTES: High-fired ceramic tile is non-emitting. No testing required.		

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.

GROUT MANUFACTURER (OR GENERIC): Laticrete
HPD URL: https://cdnmdm.laticrete.com/ProductAssets/Objects%20Assets/New%20PERMACOLOR%20HPD%20v2.3_3.pdf ACCESSORY TYPE: Installation Accessory CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Accessories are site-applied and not included in this product formulation. VOC content and emissions must be assessed separately.

ADHESIVE (THINSET) MANUFACTURER (OR GENERIC): Laticrete
HPD URL: https://cdnmdm.laticrete.com/ProductAssets/Product%20Documents/253-grey-hpd-la-en.pdf ACCESSORY TYPE: Adhesive CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES: Accessories are site-applied and not included in this product formulation. VOC content and emissions must be assessed separately.

Section 5: General Notes

This HPD represents the red-bodied version of Arto’s ceramic tile line glazed with Signature Low-Fired Glazes. Grog is recycled from roofing tile scrap and included as a performance filler. Fired tile contains no VOCs and no remaining process water/CMC. UVCB approach used for clays/grog at 100-ppm threshold; known phases identified; proportions variable.

MANUFACTURER INFORMATION

MANUFACTURER: **arto**
ADDRESS: **15209 S Broadway**
Gardena, California West Rancho Dominguez
COUNTRY: **United States**
LATITUDE: **-118.2794000**
LONGITUDE: **33.9100000**

WEBSITE: **www.arto.com**
CONTACT NAME: **Julie Grajeda**
TITLE: **Head of Product and Sustainability**
PHONE: **310-768-8500**
EMAIL: **julie@arto.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.

