

NG KÜTAHYA SERAMİK PORCELAIN TILES

by NG Kütahya Seramik

HPD UNIQUE IDENTIFIER: 598615305216
HPD UNIQUE PRODUCT ID: Not provided.
CLASSIFICATION: 09 30 13 Ceramic Tiling
PRODUCT TYPE: Porcelain (Tile)

PRODUCT DESCRIPTION: Porcelain tiles manufactured by NG Kütahya Seramik are high-performance ceramic products designed for both interior and exterior wall and floor applications. The products are fired at high temperatures between 1200–1215°C, resulting in low water absorption, high mechanical strength, and long-lasting durability. With a weight range of 18–45 kg/m² and a thickness range of 6–20 mm, these porcelain tiles are suitable for residential, commercial, and industrial applications. Their vitrified structure provides excellent chemical resistance, abrasion resistance, and durability against environmental conditions.

SCREENING DATE: 2026-04-07
PUBLISHED DATE: 2026-06-16
EXPIRY DATE: 2029-04-07
PREPARER: Self-Prepared

Health Product Declaration v3.0
created via: HPDC Online Builder

Section 1: Summary

Nested Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format → Nested Materials Method	Residuals/Impurities Evaluation Completed in 2 of 2 Materials	For all contents above the threshold, the manufacturer has:
Threshold Disclosed Per → Product	Explanation(s) provided for Residuals/Impurities? Yes	Characterized Provided weight and role. Yes
Threshold Level → 1,000 ppm		Screened Provided screening results using HPDC-approved methods. No
		Identified Provided name and CAS RN or other identifier. No

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

BODY [FELDSPAR LT-UNK | MAM KAOLIN CLAY (PRIMARY CASRN IS 1332-58-7) LT-UNK | CAN (UNFIRED INDUSTRIAL WASTE) Not Screened KAOLIN LT-UNK | CAN (FIRED CERAMIC WASTE) Not Screened GLAZE [FRITS, CHEMICALS (UNLEADED) LT-P1 | MUL QUARTZ BM-1 | CAN | MAM | GEN FELDSPAR POWDER NoGS POTASSIUM ALUMINUM SILICATE NoGS KAOLIN LT-UNK | CAN KAOLIN CLAY (PRIMARY CASRN IS 1332-58-7) LT-UNK | CAN WOLLASTONITE LT-UNK ALUMINUM OXIDE BM-2 | CAN | MAM ZIRCONIUM DIOXIDE LT-P1 | CAN | EYE ZINC OXIDE BM-1 | END | MUL | AQU | MAM | REP DOLOMITE NoGS EDIFAS B LT-UNK | AQU MAGNESITE NoGS PENTASODIUM TRIPOLYPHOSPHATE LT-UNK | EYE]

Number of Greenscreen BM-4/BM3 contents ... 0
Contents highest-concern GreenScreen score(s) (BM-1, LT-1, LT-P1) ... LT-P1, BM-1
Nanomaterial ... No
INVENTORY AND SCREENING NOTES:

The ceramic tile consists of a body and glaze layer composed primarily of mineral-based raw materials such as kaolin (clay), feldspar, quartz, and aluminosilicates in the body, and frits, mineral additives, and functional agents in the glaze. The raw materials are mixed with water to form a homogeneous slurry. The body slurry is spray-dried to obtain granules suitable for pressing, and these granules are shaped under high pressure to form the green body. The glaze is prepared separately using frits, opacifiers (e.g., zircon), fluxes, and processing additives such as dispersants and binders (e.g., STPP, CMC) to achieve the desired surface properties. The glaze is applied onto the body before firing. The product is fired at high temperatures (approximately 1200–1215°C), resulting in a vitrified, dense, and mechanically stable ceramic structure. During firing, organic components are decomposed and mineral phases are transformed into a stable and inert matrix. All substances have been evaluated based on available composition data and Safety Data Sheets (SDS). No substances are present above the reporting threshold, and any potential impurities are considered to be present only at trace levels and are not intentionally added.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT
VOC Content data is not applicable for this product category.

COMPLIANCE See Section 3 for additional listings.
VOC emissions: UL/GreenGuard Certified
VOC emissions: UL/GreenGuard Gold Certified
VOC emissions: UL/GreenGuard Certified
VOC emissions: UL/GreenGuard Gold Certified

CONSISTENCY WITH OTHER PROGRAMS

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 3.0, available on the HPDC website at: www.hpd-collaborative.org/hpd-3-0-standard

BODY		%: 90.0000 - 95.0000	
PRODUCT THRESHOLD: 1000 ppm		RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Ceramic
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities related to the body composition (clay, kaolin, feldspar, industrial waste, fired waste, quartz, clay, and potassium feldspar) have been evaluated based on available supplier information and material safety data. No residuals or impurities are present above the reporting threshold. Any trace substances, if present, are below the reporting threshold and are not intentionally added. The body is composed primarily of mineral-based raw materials and recycled production inputs. During the high-temperature firing process (1200–1215°C), these materials form a dense and stable ceramic structure, limiting the presence and mobility of residual substances.			
OTHER MATERIAL NOTES: The body consists primarily of mineral-based raw materials including clay, kaolin, feldspar, and quartz, along with internally recycled production waste. Unfired industrial waste (raw scrap and semi-finished production losses) and fired ceramic waste (rejected fired products and broken pieces) are reintroduced into the process as secondary raw materials.			
The material is processed through high-temperature firing (1200–1215°C), resulting in a dense and durable ceramic structure.			

FELDSPAR			ID: 68476-25-5	
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-04-07 0:16:22	
%: 35.0000 - 50.0000	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: Alkali feldspars are used in porcelain tile formulations as fluxing agents to lower the melting temperature during firing. They promote vitrification by forming a glassy phase, which enhances mechanical strength, reduces porosity, and improves the overall durability of the ceramic body. As naturally occurring minerals, their composition may vary depending on the source.				

KAOLIN CLAY (PRIMARY CASRN IS 1332-58-7)				ID: 12198-85-5
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 0:09:44		
%: 27.0000 - 45.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Structure component
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: Kaolinite is a naturally occurring hydrated aluminum silicate used as a primary structural component in ceramic bodies. It contributes to shaping properties, mechanical strength, and dimensional stability during processing and firing. As a naturally sourced mineral, its composition may vary, and trace impurities can be present depending on the geological origin.		

(UNFIRED INDUSTRIAL WASTE)

ID: **Unknown**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: Not Screened	
%: 7.5000 - 15.0000	GreenScreen: Not Screened	RC: PreC	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
	Hazard Screening not performed			
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
	Additional Hazard Screening not performed			

SUBSTANCE NOTES: Unfired industrial waste originating from in-house production scrap and semi-finished material losses is reused as a secondary raw material in the ceramic body. This material is reintroduced into the production process to improve resource efficiency and reduce raw material consumption. Its composition may vary depending on the source and production conditions.

KAOLIN

ID: **1332-58-7**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 0:12:43		
%: 2.0000 - 10.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
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: Kaolin (hydrated aluminum silicate) is used in porcelain tile bodies as a suspension agent and rheology modifier to improve slurry stability and ensure homogeneous distribution of particles during processing. It also contributes to workability and helps prevent sedimentation in ceramic formulations. During firing, kaolin participates in the formation of the ceramic matrix, enhancing mechanical integrity and dimensional stability.

(FIRED CERAMIC WASTE)

ID: **Not Registered**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: Not Screened		
%: 2.0000 - 8.0000	GreenScreen: Not Screened	RC: PreC	NANO: No	SUBSTANCE ROLE: Filler

HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS
	Hazard Screening not performed	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION
	Additional Hazard Screening not performed	
SUBSTANCE NOTES: Fired ceramic waste consisting of rejected fired products and broken ceramic pieces is reused as a secondary raw material in the ceramic body. This material is reintroduced into the production process to improve resource efficiency and reduce raw material consumption. Its composition may vary depending on production conditions.		

GLAZE	%: 5.0000 - 10.0000	
PRODUCT THRESHOLD: 1000 ppm	RESIDUALS AND IMPURITIES EVALUATION COMPLETED: Yes	MATERIAL TYPE: Ceramic
RESIDUALS AND IMPURITIES NOTES: Residuals and impurities related to the glaze composition (quartz, clay, potassium feldspar, kaolin, frit, sodium feldspar, zircon, aluminum oxide, STPP, CMC, wollastonite, dolomite, magnesite, and zinc oxide) have been evaluated based on available supplier information and material safety data. No residuals or impurities are present above the reporting threshold. Any trace substances, if present, are below the reporting threshold and are not intentionally added. During the high-temperature firing process (1200–1215°C), these materials undergo vitrification, forming a stable and inert glassy layer that limits the presence and mobility of residual substances.		
OTHER MATERIAL NOTES: The glaze consists of mineral-based raw materials including quartz, feldspar, kaolin, zircon, aluminum oxide, and various functional additives such as fluxes, stabilizers, and surface-modifying agents. These materials are formulated to achieve desired surface properties including durability, chemical resistance, and aesthetic finish. During high-temperature firing (1200–1215°C), the glaze forms a vitrified and stable glassy layer on the ceramic surface.		

FRITS, CHEMICALS (UNLEADED)				ID: 65997-18-4
HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 3:26:44		
%: 10.0000 - 50.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Glass component
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)		
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026		
		Cosmetics & Personal Care Products		

SUBSTANCE NOTES: Frit is a pre-fused inorganic glaze component used in ceramic glaze formulations to provide chemical resistance, surface stability, and controlled melting behavior during firing. It contributes to the formation of a durable glassy layer on the tile surface and helps improve the overall performance of the glaze.

QUARTZ	ID: 14808-60-7
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%: **4.0000 - 30.0000**

GreenScreen: **BM-1**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Glass component**

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: Quartz (silicon dioxide) is used in glaze formulations as a glass component. It contributes to the formation of the glassy phase during firing, enhancing surface hardness, chemical resistance, and durability. It also helps control thermal expansion and improves the overall stability of the glaze.		

FELDSPAR POWDER

ID: **12168-80-8**

%: **5.0000 - 25.0000**

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: Sodium feldspar (albite) is used in glaze formulations as a flux to reduce the melting temperature during firing. It supports the formation of a stable glassy phase and contributes to surface smoothness, chemical resistance, and overall durability of the glaze layer.		

POTASSIUM ALUMINUM SILICATE

ID: 12251-44-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 0:33:50		
%: 7.0000 - 20.0000	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: Potassium feldspar (orthoclase) is used in glaze formulations as a flux to reduce the melting temperature during firing. It promotes the formation of a glassy phase, improving surface smoothness, chemical resistance, and overall durability of the glaze. It also contributes to the development of the final appearance and stability of the glazed surface.				

KAOLIN

ID: 1332-58-7

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 3:24:16		
%: 1.0000 - 20.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Binder
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: Kaolin (hydrated aluminum silicate) is used in glaze formulations to improve suspension stability and ensure homogeneous distribution of particles in the slurry. It also enhances application properties and helps maintain a uniform coating on the ceramic surface. During firing, it contributes to the formation of the glassy matrix and improves the mechanical integrity of the glaze layer.				

KAOLIN CLAY (PRIMARY CASRN IS 1332-58-7)

ID: 12198-85-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 0:31:16		
%: 1.0000 - 13.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Processing regulator

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: Kaolinite (clay) functions as a processing regulator in the glaze formulation, improving slurry stability, controlling rheological properties, and preventing particle sedimentation. It ensures homogeneous distribution and consistent application during processing.

WOLLASTONITE

ID: **13983-17-0**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-04-07 1:06:57		
#: 1.0000 - 10.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Matting agent	
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: Wollastonite (calcium silicate) is used in glaze formulations as a matting agent to control surface finish by influencing crystallization and melt viscosity during firing. It contributes to the development of matte or semi-matte surfaces and enhances mechanical strength and thermal stability of the glaze.

ALUMINUM OXIDE

ID: **1344-28-1**

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-04-07 3:35:00	
%: 1.0000 - 7.0000	GreenScreen: BM-2	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
CAN	MAK		Carcinogen Group 2 - Considered to be carcinogenic for man	
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 v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CPII)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Children's Toy Products
SUBSTANCE NOTES: Aluminum oxide is used in the glaze formulation to improve mechanical strength, surface hardness, and abrasion resistance. It also contributes to chemical durability and enhances the stability of the glassy phase during firing.		

ZIRCONIUM DIOXIDE

ID: 1314-23-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-04-07 3:32:51	
%: 0.0000 - 6.0000	GreenScreen: LT-P1	RC: None	NANO: No	SUBSTANCE ROLE: Opacifier
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
CAN	MAK	Carcinogen Group 4 - Non-genotoxic carcinogen with low risk under MAK/BAT levels		
EYE	GHS - New Zealand	Eye irritation category 2		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Zircon (zirconium oxide) is used in glaze formulations as an opacifier to provide opacity and control the visual appearance of the surface. It enhances whiteness and reduces transparency, contributing to a uniform and stable glaze finish. It also improves chemical and thermal stability of the glaze layer.

ZINC OXIDE

ID: 1314-13-2

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-04-07 0:36:55	
%: 0.5000 - 3.0000	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 v4.1 Product Standard Restricted Substances - Effective July 1, 2025 Children's Toy Products
RESTRICTED LIST	Cradle to Cradle Products Innovation Institute (C2CP II)	C2C Certified v5.0 Product Standard Restricted Substances - Effective March 16, 2026 Children's Toy Products

SUBSTANCE NOTES: Zinc oxide is used in glaze formulations as a flux to promote melting and enhance the formation of a stable glassy phase during firing. It improves surface properties such as gloss, chemical resistance, and durability, and may also contribute to opacity and crystallization effects depending on the formulation.

DOLOMITE					ID: 16389-88-1
HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-04-07 0:57:55		
%: 0.1000 - 2.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Matting agent	

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: Dolomite (calcium magnesium carbonate) is used in glaze formulations as a flux to influence melting behavior during firing. It contributes to the development of surface characteristics such as matte or glossy finishes by affecting crystallization and melt viscosity. It also enhances chemical durability and thermal stability of the glaze.		

EDIFAS B

ID: 9004-32-4

HAZARD DATA SOURCE: Pharos Chemical and Materials Library			HAZARD SCREENING DATE: 2026-06-09 5:54:57	
%: 0.1000 - 1.0000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Processing regulator
HAZARD TYPE	LIST NAME AND SOURCE		WARNINGS	
AQU	GHS - New Zealand		Hazardous to the aquatic environment - chronic category 3	
ADDITIONAL LISTINGS	LIST NAME AND SOURCE		NOTIFICATION	
POSITIVE LIST	US Environmental Protection Agency (US EPA)		US EPA - DfE Safer Chemicals Ingredients list (SCIL)	
			Chelating Agents - Green Circle (Verified Low Concern)	
SUBSTANCE NOTES:				

MAGNESITE

ID: 13717-00-5

HAZARD DATA SOURCE: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2026-04-07 0:51:42		
%: 0.1000 - 1.0000	GreenScreen: NoGS	RC: None	NANO: No	SUBSTANCE ROLE: Matting agent
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: Magnesite (magnesium carbonate) is used in glaze formulations as a flux to influence melting behavior during firing. It contributes to the development of surface characteristics such as matte or glossy finishes by affecting crystallization and viscosity. It also plays a role in improving thermal and chemical stability of the glaze.				

PENTASODIUM TRIPOLYPHOSPHATE

ID: 7758-29-4

%: 0.1000 - 0.4000	GreenScreen: LT-UNK	RC: None	NANO: No	SUBSTANCE ROLE: Dispersant
HAZARD TYPE	LIST NAME AND SOURCE	WARNINGS		
EYE	GHS - New Zealand	Eye irritation category 2		
ADDITIONAL LISTINGS	LIST NAME AND SOURCE	NOTIFICATION		
None found		No listings found on Additional Hazard Lists		

SUBSTANCE NOTES: Sodium phosphate is used as a dispersant in glaze formulations to improve slurry stability, reduce viscosity, and ensure a homogeneous distribution of particles during preparation. It enhances the deflocculation of ceramic suspensions, allowing for better flow properties and more uniform application. This contributes to improved process control, consistent coating quality, and overall stability of the glaze system during manufacturing.

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	UL/GreenGuard Certified	
COMPLIANCE TYPE: Third-party certification CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL Solutions – GREENGUARD Certification - Certificate No: 413596-410 COMPLIANCE DETAILS: COMPLIANCE SCOPE: Product APPLICABLE FACILITIES: Production sites covered under the UL certification. COMPLIANCE URL: https://ngkutahyaseramik.com.tr/uploads/2025/10/22/porcelain-tile-antislip-greenguard-certification.pdf COMPLIANCE NOTES: Porcelain Tile products are GREENGUARD Certified in accordance with UL 2818:2022 – Standard for Chemical Emissions for Building Materials, Finishes and Furnishings. Products were tested in accordance with the UL 2821 test method to demonstrate compliance with emission limits specified in UL 2818, Section 7.1. Wall finishes are determined compliant using an office environment with an air change rate of 0.68 h⁻¹ and a loading factor of 33.40 m². The products comply with GREENGUARD emission criteria, including limits for Total Volatile Organic Compounds (TVOC ≤ 0.50 mg/m³), formaldehyde, total aldehydes, and individual VOCs as defined by UL 2818 and CDPH Standard Method v1.2.	ISSUE DATE: 2025-10-21	EXPIRY DATE: 2026-10-21
VOC EMISSIONS	UL/GreenGuard Gold Certified	
COMPLIANCE TYPE: Third-party certification CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL Solutions – GREENGUARD Gold Certification - Certificate No: 413596-420 COMPLIANCE DETAILS: COMPLIANCE SCOPE: Product APPLICABLE FACILITIES: Production sites covered under the UL certification. COMPLIANCE URL: https://ngkutahyaseramik.com.tr/uploads/2025/10/22/porcelain-tile-antislip-greenguard-gold-certification.pdf COMPLIANCE NOTES: This product is GREENGUARD Gold Certified in accordance with UL 2818:2022, meeting more stringent emission limits compared to standard GREENGUARD certification. The Gold certification is designed for sensitive indoor environments such as schools and healthcare facilities, based on California Department of Public Health (CDPH) Standard Method v1.2. It complies with lower allowable emission thresholds, including a reduced TVOC limit of 0.22 mg/m³ and stricter criteria for formaldehyde, aldehydes, and individual VOCs, ensuring enhanced indoor air quality performance.	ISSUE DATE: 2025-10-21	EXPIRY DATE: 2026-10-21
VOC EMISSIONS	UL/GreenGuard Certified	

CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL
Solutions – GREENGUARD Certification - Certificate No:
418189-410

COMPLIANCE DETAILS:

COMPLIANCE SCOPE: Product

APPLICABLE FACILITIES: Production sites covered under
the UL certification.

COMPLIANCE URL:

<https://ngkutahyaseramik.com.tr/uploads/2025/10/22/porcelain-tile-matt-surface-greenguard-certification.pdf>

COMPLIANCE NOTES: Porcelain Tile products are
GREENGUARD Certified in accordance with UL 2818:2022 –
Standard for Chemical Emissions for Building Materials,
Finishes and Furnishings. Products were tested using the UL
2821 test method and comply with emission limits defined in
UL 2818, Section 7.1. The certification confirms that the
products meet indoor air quality requirements, including limits
for Total Volatile Organic Compounds (TVOC ≤ 0.50 mg/m³),
formaldehyde, aldehydes, and individual VOC emissions.

VOC EMISSIONS

UL/GreenGuard Gold Certified

CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL
Solutions – GREENGUARD Gold Certification - Certificate No:
418189-420

COMPLIANCE DETAILS:

COMPLIANCE SCOPE: Product

APPLICABLE FACILITIES: Production sites covered under
the UL certification.

COMPLIANCE URL:

<https://ngkutahyaseramik.com.tr/uploads/2025/10/22/porcelain-tile-matt-surface-greenguard-gold-certification.pdf>

COMPLIANCE NOTES: This product additionally meets
GREENGUARD Gold certification requirements under UL
2818:2022, which apply more stringent emission limits
compared to standard GREENGUARD certification. The Gold
level is based on California Department of Public Health
(CDPH) Standard Method v1.2 and is intended for sensitive
indoor environments such as schools and healthcare facilities.
It complies with reduced emission thresholds, including a lower
TVOC limit of 0.22 mg/m³ and stricter criteria for
formaldehyde, aldehydes, and individual VOCs, ensuring
enhanced indoor air quality performance.

VOC EMISSIONS

UL/GreenGuard Certified

CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL
Solutions – GREENGUARD Certification - Certificate No:
413591-410

COMPLIANCE DETAILS:

COMPLIANCE SCOPE: Product

APPLICABLE FACILITIES: Production sites covered under
the UL certification.

COMPLIANCE URL:

<https://ngkutahyaseramik.com.tr/uploads/2025/10/22/porcelain-tile-shiny-surface-greenguard-certification.pdf>

COMPLIANCE NOTES: Porcelain Tile Shiny Surface products
are GREENGUARD Certified in accordance with UL
2818:2022 – Standard for Chemical Emissions for Building
Materials, Finishes and Furnishings. Products were tested
using the UL 2821 test method and comply with emission limits
defined in UL 2818, Section 7.1. The certification confirms
compliance with indoor air quality criteria, including limits for
Total Volatile Organic Compounds (TVOC ≤ 0.50 mg/m³),
formaldehyde, aldehydes, and individual VOC emissions.

VOC EMISSIONS

UL/GreenGuard Gold Certified

COMPLIANCE TYPE: Third-party certification CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: UL Solutions – GREENGUARD Gold Certification - Certificate No: 413591-420 COMPLIANCE DETAILS: COMPLIANCE SCOPE: Product APPLICABLE FACILITIES: Production sites covered under the UL certification. COMPLIANCE URL: https://ngkutahyaseramik.com.tr/uploads/2025/10/22/porcelain-tile-shiny-surface-greenguard-gold-certification.pdf COMPLIANCE NOTES: This product additionally meets GREENGUARD Gold certification requirements under UL 2818:2022, which apply more stringent emission limits compared to standard GREENGUARD certification. The Gold certification follows California Department of Public Health (CDPH) Standard Method v1.2 and is intended for sensitive indoor environments such as schools and healthcare facilities. It complies with reduced emission thresholds, including a lower TVOC limit of 0.22 mg/m³ and stricter criteria for formaldehyde, aldehydes, and individual VOCs, ensuring enhanced indoor air quality performance.	ISSUE DATE: 2025-10-21 EXPIRY DATE: 2026-10-21
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MANAGEMENT

ISO 9001:2015 Quality management systems

COMPLIANCE TYPE: Third-party certification

CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: TSE

(Turkish Standards Institution), IQNet recognized

COMPLIANCE DETAILS:

COMPLIANCE SCOPE: Company-wide

APPLICABLE FACILITIES: All manufacturing facilities

listed in the certificate (Kütahya plants: Umut, Fayans,

Granit, Yer 1, Yer 2)

COMPLIANCE URL:

https://ngkutahyaseramik.com.tr/uploads/2025/09/26/kalite-

yonetim-sistemi-belgesi-2025-iqnet.pdf

COMPLIANCE NOTES: The organization is certified to ISO

9001:2015 Quality Management System by TSE, with

international recognition through IQNet. The certification

applies to all relevant manufacturing facilities and confirms

the implementation and maintenance of a consistent and

effective quality management system across the

organization.

ISSUE DATE: 2025-09-11

EXPIRY DATE: 2027-06-06

MANAGEMENT

ISO 45001:2018 Occupational health and safety management systems

COMPLIANCE TYPE: Third-party certification

CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: TSE

(Turkish Standards Institution), IQNet recognized

COMPLIANCE DETAILS:

COMPLIANCE SCOPE: Company-wide

APPLICABLE FACILITIES: All manufacturing facilities

covered under the certificate (Umut, Fayans, Granit, Yer 1

and Yer 2 plants, Kütahya, Türkiye)

COMPLIANCE URL:

https://ngkutahyaseramik.com.tr/uploads/2025/10/30/isg-

yonetim-sistemi-belgesi-2025-iqnet.pdf

COMPLIANCE NOTES: The organization is certified to ISO

45001:2018 Occupational Health and Safety Management

System by TSE, with international recognition through

IQNet. The certification applies to all relevant manufacturing

facilities and confirms the implementation and maintenance

of a structured system to manage occupational health and

safety risks and improve workplace safety performance

across the organization.

ISSUE DATE: 2024-09-24

EXPIRY DATE: 2027-06-21

MANAGEMENT

ISO 14001:2015 - Environmental management systems

COMPLIANCE TYPE: Third-party certification

CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: TSE

(Turkish Standards Institution), IQNet recognized

COMPLIANCE DETAILS:

COMPLIANCE SCOPE: Product Line

APPLICABLE FACILITIES: All manufacturing facilities

covered under the certificate (Umut, Fayans, Granit, Yer 1

and Yer 2 plants, Kütahya, Türkiye)

COMPLIANCE URL:

https://ngkutahyaseramik.com.tr/uploads/2025/10/30/cevre-

yonetim-sistemi-belgesi-2025-iqnet.pdf

COMPLIANCE NOTES: The organization is certified to ISO

14001:2015 Environmental Management System by TSE,

with international recognition through IQNet. The

certification applies to all relevant manufacturing facilities

and confirms the implementation and maintenance of a

systematic approach to managing environmental impacts,

ensuring regulatory compliance, and promoting continuous

environmental performance improvement across the

organization.

ISSUE DATE: 2025-09-17

EXPIRY DATE: 2027-06-22

LCA		Environmental Product Declaration (EPD) by EPD International AB	
COMPLIANCE TYPE: Third-party certification		ISSUE DATE: 2025-11-30	EXPIRY DATE: 2030-11-29
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: Dr. Rajesh Kumar Singh (Third-party verifier), approved by International EPD System (EPD International AB)			
COMPLIANCE DETAILS:			
COMPLIANCE SCOPE: Product			
APPLICABLE FACILITIES: NG Kütahya Seramik production facility located at Çalca Mahallesi, 43001, Kütahya, Türkiye.			
COMPLIANCE URL:			
https://ngkutahyaseramik.com.tr/uploads/2025/12/09/ng-kutahya-seramik-20-mm-epd-document-epd-ies-0025738-001-en.pdf			
COMPLIANCE NOTES: This Environmental Product Declaration (EPD) has been developed in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019 standards. The declaration is based on a life cycle assessment (LCA) conducted using SimaPro Craft software and ecoinvent database. Independent third-party verification has been carried out. The EPD covers multiple products based on worst-case results and is valid for the specified period. Results represent cradle-to-gate with options, including modules A1–A3, A4–A5, B, C, and D. The product does not contain SVHC substances above 0.1% by weight.			

LCA		Environmental Product Declaration (EPD) by EPD International AB	
COMPLIANCE TYPE: Third-party certification		ISSUE DATE: 2023-02-10	EXPIRY DATE: 2028-02-09
CERTIFIER/VERIFIER/TESTING LAB/AUDITOR: Prof. Ing. Vladimír Kočí			
COMPLIANCE DETAILS:			
COMPLIANCE SCOPE: Product			
APPLICABLE FACILITIES: NG Kütahya Seramik production facility located at Çalca Mahallesi, 43001, Kütahya Türkiye.			
COMPLIANCE URL:			
https://environdec.com/library/epd6777			
COMPLIANCE NOTES: The Environmental Product Declaration (EPD) for Porcelain Tile manufactured by NG Kütahya Seramik has been developed in accordance with ISO 14025 and EN 15804 standards and registered under The International EPD® System. The declaration is based on a life cycle assessment (LCA) covering relevant product life cycle stages and has been independently third-party verified.			

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

The finished tiles may consist of a ceramic body, engobe layer, decorative components, and glaze layer depending on the product design and intended application. During firing, the mineral constituents undergo vitrification, resulting in a chemically stable, durable, and inert ceramic matrix. Internal pre-consumer recycled ceramic materials may be incorporated into the manufacturing process as part of standard production practices. These recycled materials consist primarily of unfired ceramic process returns and do not alter the composition, performance, or safety characteristics of the finished

product. Under normal conditions of use, the finished porcelain tiles are non-hazardous and are not expected to release substances that may adversely affect human health or the indoor environment. The products are designed for long-term durability and performance in residential, commercial, and institutional applications.

MANUFACTURER INFORMATION

MANUFACTURER: **NG Kütahya Seramik**
ADDRESS: **Çalca Mahallesi Ahmet Özten (Os) Sok. No:1/21, 1/28 & Çalca Mah. Ramazan Özen(OSB) Sk. No:2 Merkez Kütahya, Kütahya 43000 COUNTRY: Turkey**

WEBSITE: **https://ngkutahyaseramik.com.tr/en**
CONTACT NAME: **Büşra Adıgüzel**
TITLE: **Quality Management Systems Manager**
PHONE: **+90 274 225 12 00**
EMAIL: **busraadiguzel@ngkutahyaseramik.com.tr**

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 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.

