



GREENGUARD CERTIFICATION PROGRAM PROFILE STUDY TEST REPORT						
Product Description		CALACATTA FULLPOLISHED (8MM)				
Category		FLOORING				
SUMMARY		Environment	TVOC	Formaldehyde	Total Aldehydes	CREL/TLV
	GREENGUARD	Office	✓	✓	✓	✓
	GREENGUARD Gold	Office	✓	✓	✓	✓
		Classroom	✓	✓	✓	✓
✓ - meets criteria; ✓* - meets within 25%; X - over by more than 25% of criteria						

This test data is provided for general informational purposes only. The data indicate the level of emissions from the designated product and how they compare to the emission criteria of the GREENGUARD and GREENGUARD Gold standards. This data does not imply that the product has been qualified to meet the requirements of the GREENGUARD Certification program nor does it imply that the product is or is not certified by the GREENGUARD Certification program. A summary of the allowable emission limits for GREENGUARD Certification and GREENGUARD Gold Certification can be found [here](#).

Customer Information	HITIT SERAMIK SANAYI VE TICARET A.S. MUSTAFA KAYA RESITPASA MAHALLESİ ESKI BUYUKDERE CAD. WINDOWIST TOWER NO:26 KAT:15/105 MASLAK-SARIYER ISTANBUL 34467 TURKEY
Authorized by	 Allyson M. McFry Chemistry Laboratory Director

SAMPLE INFORMATION			
Test Description	The product was received by UL Environment as packaged and shipped by the customer. The package was visually inspected and stored in a controlled environment immediately following sample check-in. Just prior to loading, the product was unpackaged and prepared for the required loading to expose the top surface only. The sample was placed inside the environmental chamber and tested according to the specified protocol.		
Date Received	April 12, 2023		
Test Period	April 18, 2023 - April 19, 2023		
Area	one-sided area = 0.0864 m ²		
Environmental Chamber ID and Volume	SH4 - 0.0870 m ³		
Product Loading	0.99 m ² /m ³		
Test Conditions	1.00 ± 0.05 ACH 50% RH ± 5% RH 22.3°C - 23.3°C		
***Laboratory Locations	Testing Laboratory	Analytical Laboratory	Technical Reporting Location
	ULE - Marietta	ULE - Marietta	ULE - Marietta

The temperature range specification is 23°C ± 1°. The actual temperature range listed above may vary slightly. If the range is outside this specification, data was reviewed to ensure a negative impact did not occur.

MODELING PREDICTED CONCENTRATION PARAMETERS								
Certification Program	Environment Basis	Product Usage	Surface Area (m ²)	Room Volume (m ³)	ACH (1/hr)	Assumed Decay Parameters		
						k _T	k _F	k _A
GREENGUARD and GREENGUARD Gold Office	CDPH/EHLB/Standard Method	wall	33.4	30.6	0.68	0.003	0.002	0.002
GREENGUARD Gold Classroom	CDPH/EHLB/Standard Method	wall	94.6	231	0.82	0.003	0.002	0.002

RESULTS				
Analyte	24 Hour Emission Factor (µg/m ² •hr)	168 Hour Predicted Concentration		
		GREENGUARD	GREENGUARD Gold	
			Office	Classroom
TVOC	BQL	< 0.002 mg/m ³	< 0.002 mg/m ³	< 0.001 mg/m ³
Formaldehyde	BQL	< 0.002 ppm	< 0.002 ppm	< 0.001 ppm
Total Aldehydes	BQL	< 0.002 ppm	< 0.002 ppm	< 0.001 ppm

BQL denotes below quantifiable level of 0.04 µg based on a standard 18 L air collection volume for TVOC and individual VOCs and 0.1 µg based on a standard 45 L air collection volume for formaldehyde and total aldehydes.

IDENTIFIED VOLATILE ORGANIC COMPOUNDS AT 24 ELAPSED EXPOSURE HOURS		
CAS Number	Compound	Emission Factor (µg/m ² •hr)
---	none	---

Quantifiable level is 0.04 µg based on a standard 18 L air collection volume.

*Indicates NIST/EPA/NIH best library match only based on retention time and mass spectral characteristics.

†Denotes quantified using multipoint authentic standard curve. Other VOCs quantified relative to toluene.

TARGET LIST ALDEHYDES AT 24 ELAPSED EXPOSURE HOURS		
CAS Number	Compound	Emission Factor (µg/m ² •hr)
4170-30-3	2-Butenal	
75-07-0	Acetaldehyde	
100-52-7	Benzaldehyde	
5779-94-2	Benzaldehyde, 2,5-dimethyl	
529-20-4	Benzaldehyde, 2-methyl	
620-23-5/104-87-0	Benzaldehyde, 3- and/or 4-methyl	
123-72-8	Butanal	
590-86-3	Butanal, 3-methyl	
50-00-0	Formaldehyde	
66-25-1	Hexanal	
110-62-3	Pentanal	
123-38-6	Propanal	

Quantifiable level is 0.1 µg is based on a standard 45 L air collection volume

Analyses based on EPA Compendium Method TO-17 and ASTM D 6196 for VOCs by thermal desorption followed by gas chromatography/mass spectrometry (TD/GC/MS), and EPA Method TO-11A and ASTM D 5197 for selected aldehydes by high performance liquid chromatography (HPLC).

Testing followed UL 2821, "GREENGUARD Certification Program Method for Measuring and Evaluating Chemical Emissions From Building Materials, Finishes and Furnishings Using Dynamic Environmental Chambers" 2013.

*Accredited Laboratory Locations	
Location	Address
ULE - Marietta	UL Environment 2211 Newmarket Parkway, Marietta, GA 30067-9399 USA
ULE - Guangzhou	UL Verification Services (Guangzhou) 1-3F & Room 501, Building 2 (R&D Center A1), No. 25, South Huanshi Avenue, Nansha District, Guangzhou 511458, China
ULE - Cabiato	UL International Italia S.r.l ATTN: IAQ Laboratory Via Europa, 9, I – 22060 – Cabiato (Como), Italia
ULE - Vietnam	UL VS (VIET NAM) CO. LTD., Lot C5, Conurbation 2, Street K1, Cat Lai Industrial Zone, Thanh My Loi Ward, District 2, Ho Chi Minh City, Vietnam
UL - Shimadzu	Shimadzu Techno-Research, Inc. 1, Nishinokyo-Shimoaicho Nakagyo-ku, Kyoto 604-8436 Japan
KCL	Korea Conformity Laboratories #805, I-Valley, 149 Gongdan-ro Gunpo-si, Gyeonggi-do, 15849 Korea
Normec	Normec Product Testing N.V. Honderdweg 13, 9320 Wetteren Belgium

Date Issued: April 25, 2023
 Product ID #: 1001858382-5845965
 Test Report #: 1001858382-5845965
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 V2PSBCM

CHAIN OF CUSTODY

INTERNAL Use Only		5845965	
Project #	1001858382	Description	CALACATTA FULLPOLISHED (8mm)
Product #	5845965	Customer	Hitit Seramik Sanayi ve Ticare
Order #	14708954	Received Date:	2023-APR-12 15:04:01
Task Line	3.1	UL BU	
1 of 3		1 of 4	
<input type="checkbox"/> Rush Request - Subject to upcharge. Customer must confirm.		CUXCCE268	
GREENGUARD Test Information			
Test Type	<input checked="" type="checkbox"/> Certification Test - Annual/Initial Year	<input type="checkbox"/> Out-of-Scope Test	
	<input type="checkbox"/> Quarterly Test - Year _____ Quarter _____	<input checked="" type="checkbox"/> Profile Study Test	
Service Line	<input checked="" type="checkbox"/> GREENGUARD	<input checked="" type="checkbox"/> GREENGUARD GOLD	<input type="checkbox"/> Other _____
Product Category	PORCELAIN		
Subcategory	Non color body fullpolished		
Application	<input checked="" type="checkbox"/> Floor/Ceiling	<input type="checkbox"/> Panel	<input checked="" type="checkbox"/> Wall
	<input type="checkbox"/> Work Surface	<input type="checkbox"/> Other: _____	
Wet Products Only	Coverage Rate	Density	Specific Gravity
Product and Company Information			
Product Description	CALACATTA FULLPOLISHED (8mm)		
Manufacture ID#			
Company Name	Hitit Seramik Sanayi ve Ticaret A.Ş.	Date Manufactured	07.02.2023
		Contact Name	Mustafa KAYA
Address	Organize sanayi bölgesi 101. Cadde no:1 UŞAK/TURKEY	Job Title	Quality assurance manager
		Contact Phone	05321312080
		Contact Email	Mustafa.kaya@hititseramik.com
Collection Information			
Collector Name	DHL	Date Collected	4/7/2023
Collector Phone		Time Collected	
Collector Signature		Collection Location	UŞAK/TURKEY
Shipping Information			
Carrier	DHL	Date Shipped	4/7/2023
Shipper Name	Hitit Seramik Sanayi ve Ticaret A.Ş	Time Shipped	
Shipper Phone	05321312080	Air Bill #	6371260990
Shipper Signature			
Sample Submitted to			
<input checked="" type="checkbox"/> UL Environment (Marietta)	<input type="checkbox"/> UL Verification Services (Guangzhou)	<input type="checkbox"/> UL International Italia S.r.l	<input type="checkbox"/> Other
2211 Newmarket Pkwy Suite 106 Marietta, GA 30067, USA	Building A1, 3F, Nansha Science and Technology Innovation Ctr. No. 25, South Huanshi Avenue, Nansha District, Guangzhou 511458, China	ATTN: IAQ Laboratory Via Europa, 9 I - 22060 - Cabiante (Como), Italia	
Post Testing Sample Disposition			
(Sample will be disposed of 30 days after report is issued if information below is not provided)			
Return Shipping Co.		Customer Shipping Acct #	
Internal Use Only - Receiving Information			
Receiver Name		Receiver Signature	
Condition Upon Arrival	<input checked="" type="checkbox"/> Acceptable	Receive Date	4/12/23
Condition Notes	<input type="checkbox"/> Not Acceptable	Receive Time	11:00 AM
Completed By	Based On	Date	

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