
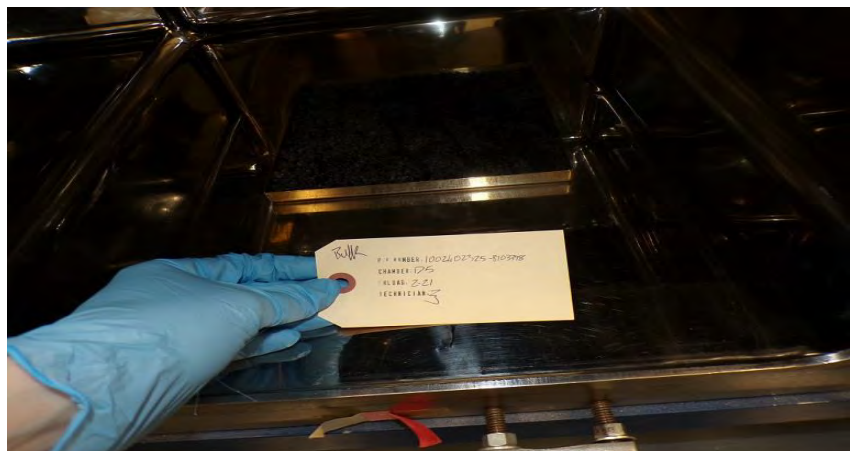


THE CARPET & RUG INSTITUTE, INC. GREEN LABEL PLUS PROGRAM 14 DAY TEST				
Office	Meets Criteria	✓	Exceeds Criteria	
Classroom	Meets Criteria	✓	Exceeds Criteria	
CRI Identification		20240904-B2242 15X		
Date Collected		January 30, 2025		
Date Received		February 3, 2025		
Testing Laboratory		UL Environment • 2211 Newmarket Parkway • Marietta GA 30067-9399 USA		
Test Date		February 7, 2025 - February 21, 2025		
Product Area Exposed		one-sided area = 0.0361 m <sup>2</sup>		
Environmental Chamber ID and Volume		SD5 - 0.0862 m <sup>3</sup>		
Product Loading		0.42 m <sup>2</sup> /m <sup>3</sup>		
Test Chamber Conditions		Air change rate: 1.00 ± 0.05 1/h Inlet air flow rate: 0.0862 ± 0.004 m <sup>3</sup> /h	Temperature: 21.9°C - 22.8°C* Relative Humidity: 50% RH ± 5%	
Test Method		Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers Version 1.2 (California Section 01350) ASTM D 5116-17 and ASTM D 7339-18		
Authorized by		 Allyson M. McFry Chemistry Laboratory Director		
<p>*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.</p> <p>Sample tested in accordance with the CRI Green Label Plus Program, and the results are presented in Tables 1, 2, and 3 for the evaluation for compliance as stated in The Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers.</p> <p>Standard Test Methodology for Determining Volatile Organic Compound Emission Factors From Carpet and Associated Materials under Defined Test Conditions Using Small Environmental Chambers. Based on EPA Carpet Policy Dialogue Method accepted September, 1991 and reviewed by CA-DHS.</p> <p>This test is accredited and meets the requirements of ISO/IEC 17025 as verified by ANSI National Accreditation Board. Refer to certificate and scope of accreditation AT-1297.</p>				

## PHOTOGRAPH OF SAMPLE



**TABLE 1**

CRI Identification		20240904-B2242 15X						
COMPARISON OF DATA TO METHOD REQUIREMENTS AT 96 HOURS FOLLOWING 10 DAYS OF CONDITIONING								
GLP TARGET LIST								
Compound	CAS Number	CRI Criteria (µg/m³)	Chamber Concentration (µg/m³)	Emission Factor <sup>††</sup> (µg/m²·hr)	Predicted Concentration (µg/m³) <sup>**</sup>		Meets Criteria?	
					Office	Classroom	Office	Classroom
1-Methyl-2-pyrrolidinone	872-50-4	160	BQL	BQL	BQL	BQL	Yes	Yes
2-Ethylhexanoic Acid	149-57-5	25	BQL	BQL	BQL	BQL	Yes	Yes
4-Phenylcyclohexene (4-PC)	4994-16-5	27	BQL	BQL	BQL	BQL	Yes	Yes
ε-Caprolactam (2H-Azepin-2-one, hexahydro)	105-60-2	100	19	45	24	21	Yes	Yes
Nonanal	124-19-6	13	BQL	BQL	BQL	BQL	Yes	Yes
Octanal	124-13-0	7.2	BQL	BQL	BQL	BQL	Yes	Yes

**TABLE 2**

COMPARISON OF DATA TO CDPH/EHLB/STANDARD METHOD REQUIREMENTS								
Compound	CAS Number	½ CREL Criteria (µg/m³)	Chamber Concentration (µg/m³)	Emission Factor†† (µg/m²•hr)	Predicted Concentration (µg/m³)**		Meets Criteria?	
					Office	Classroom	Office	Classroom
Acetaldehyde	75-07-0	70	BQL	BQL	BQL	BQL	Yes	Yes
Benzene	71-43-2	1.5	BQL	BQL	BQL	BQL	Yes	Yes
Carbon disulfide	75-15-0	400	BQL	BQL	BQL	BQL	Yes	Yes
Carbon tetrachloride	56-23-5	20	BQL	BQL	BQL	BQL	Yes	Yes
Chlorobenzene	108-90-7	500	BQL	BQL	BQL	BQL	Yes	Yes
Chloroform	67-66-3	150	BQL	BQL	BQL	BQL	Yes	Yes
Dichlorobenzene (1,4-)	106-46-7	400	BQL	BQL	BQL	BQL	Yes	Yes
Dichloroethylene (1,1)	75-35-4	35	BQL	BQL	BQL	BQL	Yes	Yes
Dimethylformamide (N,N-)	68-12-2	40	BQL	BQL	BQL	BQL	Yes	Yes
Dioxane (1,4-)	123-91-1	1,500	BQL	BQL	BQL	BQL	Yes	Yes
Epichlorohydrin	106-89-8	1.5	BQL	BQL	BQL	BQL	Yes	Yes
Ethylbenzene	100-41-4	1,000	BQL	BQL	BQL	BQL	Yes	Yes
Ethylene glycol	107-21-1	200	BQL	BQL	BQL	BQL	Yes	Yes
Ethylene glycol monoethyl ether acetate	111-15-9	150	BQL	BQL	BQL	BQL	Yes	Yes
Ethylene glycol monoethyl ether	110-80-5	35	BQL	BQL	BQL	BQL	Yes	Yes
Ethylene glycol monomethyl ether acetate	110-49-6	45	BQL	BQL	BQL	BQL	Yes	Yes

COMPARISON OF DATA TO CDPH/EHLB/STANDARD METHOD REQUIREMENTS								
Compound	CAS Number	$\frac{1}{2}$ CREL Criteria ( $\mu\text{g}/\text{m}^3$ )	Chamber Concentration ( $\mu\text{g}/\text{m}^3$ )	Emission Factor <sup>††</sup> ( $\mu\text{g}/\text{m}^2\cdot\text{hr}$ )	Predicted Concentration ( $\mu\text{g}/\text{m}^3$ ) <sup>**</sup>		Meets Criteria?	
					Office	Classroom	Office	Classroom
Ethylene glycol monomethyl ether	109-86-4	30	BQL	BQL	BQL	BQL	Yes	Yes
Formaldehyde	50-00-0	9.0 <sup>***</sup>	BQL	BQL	BQL	BQL	Yes	Yes
Hexane (n-)	110-54-3	3,500	BQL	BQL	BQL	BQL	Yes	Yes
Isophorone	78-59-1	1,000	BQL	BQL	BQL	BQL	Yes	Yes
Isopropanol	67-63-0	3,500	BQL	BQL	BQL	BQL	Yes	Yes
Methyl chloroform	71-55-6	500	BQL	BQL	BQL	BQL	Yes	Yes
Methyl t-butyl ether	1634-04-4	4,000	BQL	BQL	BQL	BQL	Yes	Yes
Methylene chloride	75-09-2	200	BQL	BQL	BQL	BQL	Yes	Yes
Naphthalene	91-20-3	4.5	BQL	BQL	BQL	BQL	Yes	Yes
Phenol	108-95-2	100	BQL	BQL	BQL	BQL	Yes	Yes
Propylene glycol monomethyl ether	107-98-2	3,500	BQL	BQL	BQL	BQL	Yes	Yes
Styrene	100-42-5	450	BQL	BQL	BQL	BQL	Yes	Yes
Tetrachloroethylene (perchloroethylene)	127-18-4	17.5	BQL	BQL	BQL	BQL	Yes	Yes
Toluene	108-88-3	150	BQL	BQL	BQL	BQL	Yes	Yes
Trichloroethylene	79-01-6	300	BQL	BQL	BQL	BQL	Yes	Yes
Vinyl acetate	108-05-4	100	BQL	BQL	BQL	BQL	Yes	Yes
Xylenes (m-, o-, p-)	108-38-3, 95-47-6, 106-42-3	350	BQL	BQL	BQL	BQL	Yes	Yes

BQL denotes below quantifiable level of 0.04  $\mu\text{g}$  for individual VOCs, with the exceptions benzene and epichlorohydrin which have a QL of 0.02  $\mu\text{g}$ , based on a standard 18 L air collection volume.

<sup>††</sup>The emission factor (EF) is calculated from the chamber concentration (CC), the chamber air change rate ( $N_c$ ), the chamber volume ( $V_c$ ), and the product area exposed in the chamber ( $A_c$ ) as:  $EF = (CC \cdot V_c \cdot N_c) / A_c$ .

<sup>\*\*</sup>The predicted building exposure concentration (BC) is calculated from the emission factor (EF), the building air change rate ( $N_b$ ), the building room volume ( $V_b$ ), and the product area exposed in the building room ( $A_b$ ) as:  $BC = (EF \cdot A_b) / (V_b \cdot N_b)$ . Prediction based on a standard office floor usage of 11.1  $\text{m}^2$  in a 30.6  $\text{m}^3$  room with 0.68 ACH or on a standard classroom usage of 89.2  $\text{m}^2$  in a 231  $\text{m}^3$  room with 0.82 ACH.

<sup>\*\*\*</sup>Guidance value per CA Standard Method

TABLE 3

CRI Identification		20240904-B2242 15X						
TVOC AND FORMALDEHYDE CHAMBER CONCENTRATIONS, EMISSION FACTORS, AND PREDICTED AIR CONCENTRATIONS								
Elapsed Exposure Hour*	Chamber Concentration (µg/m³)		Calculated Emission Factors (µg/m²•hr)		Predicted Air Concentration** (µg/m³)			
					Office		Classroom	
	Formaldehyde	TVOC	Formaldehyde	TVOC	Formaldehyde	TVOC	Formaldehyde	TVOC
264	BQL	15	BQL	36	BQL	19	BQL	17
288	BQL	10	BQL	25	BQL	13	BQL	12
336	BQL	10	BQL	25	BQL	13	BQL	12

BQL denotes below quantifiable level of 0.04 µg for TVOC based on a standard 18 L air collection volume or 0.1 µg for formaldehyde based on a standard 45L air collection volume.

TVOC is the sum of all identified and unidentified peaks calibrated to toluene.

\*Exposure hours are nominal (±1 hour) following 10 day conditioning period in chamber.

\*\*Allowable Concentration is predicted based on a a standard office floor usage of 11.1 m² in a 30.6 m³ room with 0.68 ACH or on a standard classroom usage of 89.2 m² in a 231 m³ room with 0.82 ACH. This value is for reference only.

TABLE 4

CRI Identification		20240904-B2242 15X			
TEN MOST ABUNDANT IDENTIFIED INDIVIDUAL VOLATILE ORGANIC COMPOUNDS (VOCs) AND/OR ALDEHYDES AT 96 HOURS FOLLOWING 10 DAYS OF CONDITIONING					
CAS Number	Compound	Chamber Concentration (µg/m³)	Calculated Emission Factor (µg/m²•hr)	Calculated Predicted Exposure Concentration (µg/m³)**	
				Office	Classroom
105-60-2	Caprolactam†	19	45	24	21

VOC data obtained by scanning GC/MS; identification of compound made by retention time and mass spectral characteristics.

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

†Denotes quantified using multipoint authentic standard curve (post-calibration). Other VOCs quantified relative to toluene.

‡ Indicates compound identified and quantified by DNPH derivitization and HPLC/UV analysis.

\*\*Allowable Concentration is predicted based on a a standard office floor usage of 11.1 m² in a 30.6 m³ room with 0.68 ACH or on a standard classroom usage of 89.2 m² in a 231 m³ room with 0.82 ACH. This value is for reference only.

TABLE 5

CRI Identification		20240904-B2242 15X			
PREDICTED AIR CONCENTRATIONS AND REGULATORY INFORMATION AT 96 HOURS FOLLOWING 10 DAYS OF CONDITIONING					
Compound	Predicted Exposure Concentration** (µg/m³)		✓ Indicates Presence On List		
			CHRONIC REL	CAL PROP. 65	CAL TOXIC AIR CONTAMINANT
	Office	Classroom			
Caprolactam†	24	21			✓(V)

\*\*Allowable Concentration is predicted based on a standard office floor usage of 11.1 m² in a 30.6 m³ room with 0.68 ACH or on a standard classroom usage of 89.2 m² in a 231 m³ room with 0.82 ACH. This value is for reference only.

Chronic REL: California Office of Environmental Health Hazard Assessment (OEHHA), Chronic Reference Exposure Levels  
✓ ( ) = Found in Listing (Criterion)

CAL Prop. 65 (update December 29, 2023): California Health and Welfare Agency, Proposition 65 Chemicals  
1 = known to cause cancer  
2 = known to cause reproductive toxicity

CAL Toxic Air Contaminant:

- I) Substances identified as Toxic Air Contaminants, known to be emitted in California, with a full set of health values reviewed by the Scientific Review Panel.
- IIA) Substances identified as Toxic Air Contaminants, known to be emitted in California, with one or more health values under development by the Office of Environmental Health Hazard Assessment for review by the Scientific Review Panel.
- IIB) Substances NOT identified as Toxic Air Contaminants, known to be emitted in California, with one or more health values under development by the Office of Environmental Health Hazard Assessment for review by the Scientific Review Panel.
- III) Substances known to be emitted in California, and are NOMINATED for development of health values or additional health values.
- IVA) Substance identified as Toxic Air Contaminants, known to be emitted in California, and are TO BE EVALUATED for entry into Category III.
- IVB) Substance NOT identified as Toxic Air Contaminants, known to be emitted in California, and are TO BE EVALUATED for entry into Category III.
- V) Substance identified as Toxic Air Contaminants, and NOT KNOWN TO BE EMITTED from stationary source facilities in California based on information from the AB 2588 Air Toxic "Hot Spots" Program and the California Toxic Release Inventory.
- VI) Substances identified as Toxic Air Contaminants, NOT KNOWN TO BE EMITTED from stationary source facilities in California, and are active ingredients in pesticides in California.



**Green Label Plus™**  
**Indoor Air Quality Testing Prog**  
The Carpet and Rug Institute, Inc.  
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Phone: +1 (706) 428-2137  
Email: gpl@carpet-rug.org  
www.carpet-rug.org

8103398



Description  
20240904-B2242 15X

Customer The Carpet and Rug Institute I  
Received Date: 2025-FEB-05 11:58:41  
LabWare Project No: 1002602325  
Order No.:  
Oracle Project No.:

## Green Label Plus™ Chain of C

1 of 3

Laboratory Use Only	
Project # 1002602325	Reference 1000 3680
Product # 8103398	Rush <input type="checkbox"/> Confirm with Account Manager prior to sending in sample
Receive Date 2/3/25	Receive Time 11:35 AM
Sample / Package Condition Upon Arrival <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable	Sample Condition Notes
Receiver Name	Receiver Signature

Sample / Test Information	
Sample Code 20240904-B2242	Program Category Carpet
Please reference sample code on all applicable documentation	
Type of Product Modular Tile	Product Category 15X
Application Method N/A	Test Type Biennial
Application Rate N/A	Applicator Specification N/A

GLP Program Manager Information	
Name Sonya Stephens	Office (706) 428-2137 Email sstephens@carpet-rug.org

Company Information	
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GLP Coordinator	Thandoluhle Ngwenya
Mobile	N/A
Office	+27 (0)33 897 7547
Email	Thandoluhle.ngwenya@belgotex.co.za

Collection Information	
Date Manufactured 30 Jan 2025	Date Collected 30 Jan 2025
Time Manufactured 09:08	Time Collected 09:01
Collection Location Belgotex Pietermaritzburg	Signature
Roll / Batch TX1057	Style / Product Name Earthscape Jet Black

Shipping / Tracking Information	
Laboratory Information UL Solutions 2211 New Market Pkwy SE Ste 106 Marietta, GA 30067 United States (770) 933-0638	Date Shipped 30 Jan 2025
	Time Shipped 14:50
	Carrier DHL
	Tracking # 5565 8789 75
	Shipper Name Cinde Busane
	Phone 033-8977613
Signature	