

VOCs Emission Test Certificate

Friday, January 5, 2024

Supplier:	Belgotex Floorcoverings (Pty) Ltd (20 Chesterfield Road, Willowton, Pietermaritzburg, 3201, South Africa)
Product Name:	Heavy Commercial SDX Tufted E3-BF Tile – SCP _ Academia Carpet Tile
Product Description:	100% Solution Dyed Nylon Carpet – Synthetic Primary and secondary Backing
Date Tested:	December 2023 (Tested by FORAY Laboratories – NATA Accreditation No: 1231)
Test Method:	The Carpet and Rug Institute Green Label Plus™ (GLP) incorporating ISO 10580: “Resilient, Textile and Laminate Floor Coverings: Evaluation of Volatile Organic Compound Emissions”.

Sample and Chamber conditions during the test period:

Temperature	23.3°C ± 0.3°C
Humidity	57% ± 2%
Chamber Volume	50 L
Chamber Flow Rate	0.836 L/min
Product Loading	0.8 m ² /m ³
Air Exchange Rate	1.003 hr ⁻¹
Emission Collection Time	1400 min for formaldehyde and aldehydes and 120 min for Thermal Desorption tubes for VOCs.
Sample Surface Area	0.04 m ²
Exposure of sample in chamber	24 hours

Test summary: The air samples were collected from the emission chamber at 24 hours for aldehydes and VOCs. The aldehyde gases were collected on DNPH-treated silica tubes (SKC 226-119) and analysed by Ultra High-Performance Liquid Chromatography (UHPLC). The VOC gases were collected on Perkin Elmer Tenax TA Thermal Desorption tubes and analysed by ATD-GC-MS as EPA TO-17.

Emission Data (24 hours)

The Carpet and Rug Institute, Inc. Green Label Plus™ Specification		Heavy Commercial SDX Tufted E3-BF Tile – SCP _ Academia Carpet Tile
Total Volatile Organic Compound (C ₆ -C ₁₆) emission rate limit: ≤ 500 µg/m ² /hr		Total Volatile Organic Compound emission rate: 15 µg/m ² /hr
Emission Rate Limit “Chemicals of Concern”:		Emission Rate:
Acetaldehyde	<20 µg/m ² /hr	2 µg/m ² /hr
Benzene	<55 µg/m ² /hr	<1 µg/m ² /hr
Caprolactam	<131 µg/m ² /hr	<1 µg/m ² /hr
2-Ethylhexanoic Acid	<47 µg/m ² /hr	<1 µg/m ² /hr
Formaldehyde	<10 µg/m ² /hr	2 µg/m ² /hr
1-Methyl-2-Pyrrolidinone	<300 µg/m ² /hr	<1 µg/m ² /hr
Naphthalene	<20 µg/m ² /hr	<1 µg/m ² /hr
Nonanal	<24 µg/m ² /hr	4 µg/m ² /hr
Octanal	<14 µg/m ² /hr	2 µg/m ² /hr
2-Ethyl-1-Hexanol	<50 µg/m ² /hr	<1 µg/m ² /hr
4-Phenylcyclohexene	<51 µg/m ² /hr	<1 µg/m ² /hr
Styrene	<410 µg/m ² /hr	<1 µg/m ² /hr
Hydrocarbon (C ₁₀ – C ₁₄)	<300 µg/m ² /hr	7 µg/m ² /hr
Toluene	<280 µg/m ² /hr	2 µg/m ² /hr
Vinyl Cyclohexene	<85 µg/m ² /hr	<1 µg/m ² /hr
Vinyl Acetate	<400 µg/m ² /hr	<1 µg/m ² /hr
Total Xylenes	<50 µg/m ² /hr	<1 µg/m ² /hr



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