

TFI-Report 23-000387-02

Functional and Quality Testing

Customer EGE Carpets A/S
Industrivej Nord 25
7400 Herning
DK

Product Textiler Bodenbelag/Textile floor covering
Colortec wool 1100 LF

This report includes 11 pages.



Aachen, 21.06.2023

Dr. Andreas Zoëga
Head of Testing Laboratory



The present document is provided with an advanced electronic signature.

This report only applies to the tested samples and has been established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the TFI Aachen GmbH, also with regard to the order execution.

The test result does not include any addition or deduction for uncertainties due to measurement, sample preparation, sample collection and production tolerances.



1 Transaction

Order date 23.03.2023
Your reference Dorthe Daa Pedersen
Product designation Colortec wool 1100 LF

TFI sample number 2300554

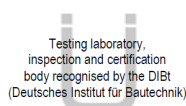
Date of sample receipt 28.03.2023
Sampling performed by Auftraggeber/Customer

Testing period 14.04.2023 - 31.05.2023

Test order:

Change in appearance according ISO 10361 ^a
Colour fastness to rubbing according EN ISO 105-X12 ^a
Colour fastness to water according EN ISO 105-E01 ^a
Characteristics of textile floor coverings according EN 1307+A3 ^a

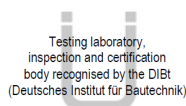
a ... Die mit a gekennzeichnete Prüfung basiert auf nach EN ISO/IEC 17025 akkreditierten Prüfungen./The test marked a are based on tests accredited in accordance with EN ISO/IEC 17025.



A. Boigga



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Testing laboratory,
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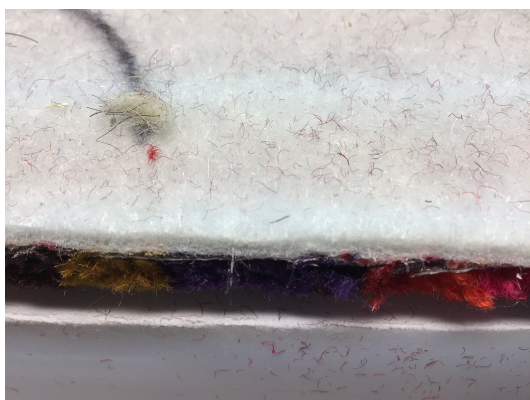
Accredited for the methods indicated in
the partial reports to the DAKKS certificate

TFI Aachen GmbH
Charlottenburger Allee 41
52068 Aachen/Germany
www.tfi-aachen.de

HRB 8157 Aachen
UST-IdNr. DE209411312
Managing Director
Dr. Jacqueline Lemm

2 Product description

TFI sample number 2300554



Thickness [mm]	12,90
Area density [g/m ²]	2149
Type of delivery	Bahnenware/broadloom



3 Results

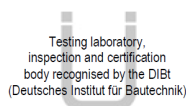
Change in appearance (median) - shortterm	3
Change in appearance (median) - longterm	2.5
Colour fastness to rubbing - dry	4-5
Colour fastness to rubbing - wet	4
Colour fastness to water - change in colour	2-3
Characteristics	Individual results see partial report KM

4 Partial Reports

- Changes in appearance according to ISO 10361
- Colour fastness to rubbing according EN ISO 105-X12
- Colour fastness to water according EN ISO 105-E01
- Characteristics of textile floor coverings according EN 1307+A3



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Partial Report SK – Use Classification and Luxury Rating

1 Transaction

TFI sample number 2300554

2 Test Method / Requirements

EN 1307:2014+A3:2019 Textile floor coverings - Classification

Deviations None

3 Results

3.1 Basic Requirements

Parameter	Result	Annex
Colour fastness to light	not determined	-
Colour fastness to rubbing - wet - dry	grade 4 grade 4-5	RE
Colour fastness to water - change in colour - staining	grade 5 grade 2-3	WE-
Basic requirements	fulfilled (if the requirements for colour fastness to light are met)	

3.3 Use Classification

Parameter	Result	
Changes in appearance		
Short term testing (median value)	3.0	AV
Long term testing (median value)	2.5	AV
Classification for change in appearance	class 31	
Level of Use	class 31 (if the requirements for colour fastness to light are met)	

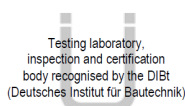


3.3. Luxury Rating

Luxury class	Annex
LC 3	KM



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Partial Report AV - Changes In Appearance

1 Transaction

TFI sample number 2300554

2 Test Method / Requirements

ISO 10361:2015 Production of changes in appearance by means of Vettermann drum and hexapod tumbler tester

Assessment standard EN ISO 9405:2017

Deviation

- No individual results of assessors given

Test method method A (Vettermann drum)

Type of underlay none

Number of assessors 3

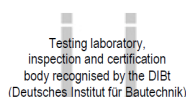
Type of vacuum cleaner Vorwerk Kobold VT270 / EB370 with rotating brush

Assessment scale ISO cut

3 Results

Parameter	Short-term wear (5,000 cycles)		Long-term wear (20,000 cycles)	
	Mean value	Median value	Mean value	Median value
Assessment	3.2	3	2.5	2.5
Grey Scale	2.8	3	2.3	2-3
Dominant property	structure, colour, pattern		structure, colour, pattern	

Comments / special observations: none





Partial Report KM - Characteristics

1 Transaction

TFI-sample number 2300554

2 Test Method / Requirements

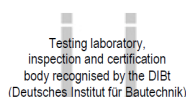
ISO 1765:1986	Determination of thickness
ISO 1766:1999	Determination of thickness of pile
ISO 1763:2020	Determination of number of tufts
ISO 8543:2020	Methods for determination of mass
Deviations	<ul style="list-style-type: none"> Determination of mass of pile per unit area on sample size :
Number of samples	4
History of the sample	not known
Tested with guarded ring	yes
Test climate	(20 ± 2) °C, (65 ± 4) % rel. Humidity
Type of shearing machine	Bandknife splitting machine

3 Ergebnisse

Parameter	Sample 1	Sample 2	Sample 3	Sample 4	Mean value	CV
Total thickness mm	12,8	12,9	12,9	12,9	12,9	0,4
Total mass per unit area g/m ²	2108	2160	2156	2171	2149	1,3
Thickness of pile mm	7,3	7,3	7,4	7,3	7,3	0,9
Mass of pile per unit area g/m ²	589	581	590	646	602	4,9
Number of tufts length per 10 cm	32,0	32,0	31,0	31,0	31,5	-
Number of tufts cross per 10 cm	28,0	29,0	27,0	28,0	28,0	-
Number of tufts per unit area per dm ²	896	928	837	868	882	4,4
Surface pile density g/cm ³	0,08	0,08	0,08	0,09	0,08	5,3

Comments: none

CV=Coefficient of friction





Partial Report RE – Rubbing Fastness

1 Transaction

TFI sample number 2300554

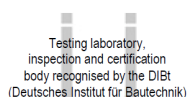
2 Test Method / Requirements

ISO 105-X12:2016	Colour fastness to rubbing
Deviation	<ul style="list-style-type: none"> Size of the rubbing cloth 50 mm x 50 mm
Conditioning of specimens and rubbing cloth	At least 24 h at (20 ± 2) °C and (65 ± 4) % rel. humidity
Test climate	(20 ± 2) °C, (65 ± 2) % rel. humidity
Rod and Force	Rectangular rod with force according standard

3 Results

Fastness grade for staining			
Production direction		Cross production direction	
dry	wet (water absorption in %)	dry	wet (water absorption in %)
4-5	4 (100)	4-5	4 (100)

Comments: none



Partial Report WE – Water Fastness

1 Transaction

TFI sample number 2300554

2 Test Method / Requirements

ISO 105-E01:2013

Colour fastness to water

Deviations

- Textile floor covering and adjacent fabric are not sewn together

Multi-fibre adjacent fabric

According to ISO 105-F10:2009

3 Results

Parameter	Fastness (grey scale grade)
Change in colour of the specimen	4-5
Staining on acetate	4
Staining on cotton	3
Staining on polyamide 6.6	2-3
Staining on polyester	4-5
Staining on polyacrylnitrile	4
Staining on wool	3

Comments: none