



Report VNIF 082128.1 Test Report



Applicant

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Reference

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Application

Determination according to the classification criteria of EN 1307 as well as castor chair suitability, suitability for using on stairs, resistance to fraying, vertical resistance and static electrical propensity.

Test Material

"ege Tuft 950 WT"

Material used in testing was anonymized for laboratory purposes. A detailed sample list is contained in the report.

Issuing and Signatures

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1 Order

1.1 Chronology

<i>Date</i>	<i>Received</i>	<i>Order</i>
2015-01-26	2015-01-28	Determination according to the classification criteria of EN 1307 as well as castor chair suitability, suitability for using on stairs, resistance to fraying, vertical resistance and static electrical propensity.

1.2 Samples

<i>No.</i>	<i>Received</i>	<i>Sample Identification</i>
1	2015-01-28 (1)	"ege Tuft 950 WT"

(1) Samples provided by the customer. (2) Sample drawn by ÖTI.



2 Findings / Tests performed

2.1 Description of specimen

Description of specimen according to ISO 2424

Test results

Tested sample: 1

Manufacturing procedure:	Tufted
Type of face side:	Loop pile
Type of base:	Non-woven fabric
Type of backing:	Textile backing
Type of coloration / pattern:	Multicoloured unpatterned
Type of fibres at face side *):	100 % Polyamide (according to the applicant)
Dimensions:	Rolls
Type of floor covering:	Pile carpet

*) According to the current version of the relevant European Directives, fibre materials with a mass percentage of < 2 % are not specified

The submitted specimen is a pile carpet according to EN 1307.

2.2 Determination of mass per unit and pile mass per unit area

Test conditions

According ISO 8543 accr.)

Test atmosphere: 20° C / 65 % rel. humidity

Type of shearing apparatus: Sharp pointed knife

Number of samples: 4

Test results

Tested sample: 1

	mass per unit area	pile mass per unit area
Mean value	2590 g/m²	573 g/m²
Coefficient of variation	1.3 %	3.4 %
Confidence interval (P = 95 %) absolute width	± 55 g/m ²	± 32 g/m ²

Note:

The pile mass per unit area of pile carpets represents the mass over the carpet-ground which can be sheared with the sharp pointed knife. If other procedures are consulted for the shearing of the pile material, then it is to be counted on deviating results. The pile mass per unit area should not be confounded with the pile weight.



2.3 Determination of thickness and thickness of wear layer

Test conditions

Testing according

Determination of thickness according to ISO 1765 ^{accr.})

Determination of thickness of wear layer according to ISO 1766 ^{accr.})

Test atmosphere: 20° C / 65 % rel. humidity

Shearing method: Sharp pointed knife

Number of samples: 4

Test results

Tested sample: 1

	total thickness	thickness of wear layer
Mean value	6.6 mm	3.8 mm
Coefficient of variation	0.8 %	1.5 %
Confidence interval (P = 95 %) absolute width	± 0.1 mm	± 0.1 mm

2.4 Calculation of surface pile density and pile fibre volume ratio

Test conditions

The calculation was made according ISO 8543 ^{accr.}) with integration of the following test results:

Pile material	Polyamide
Density of pile material	1.14 g/cm ³
Mass of pile per unit area	573 g/m ²
Thickness of above the substrate pile	3.8 mm

Test results

Tested sample: 1

Surface pile density	0.151 g/cm ³
Relative surface pile density	13.2 %

2.5 Determination of number of tufts or loops

Test conditions

According to ISO 1763 ^{accr.})

Test results

Tested sample: 1

Number of tufts or loops / 10 cm	in length direction:	45.1
	in cross direction:	48.8
Number of tufts or loops per dm ² :		2201
Number of tufts or loops per m ² :		220100



2.6 Determination of fibrebind of synthetic looppile carpets

Test conditions

Testing according EN 1963, Test C accr.)

Evaluation according: EN 1307

Duration: 400 double passages

Test results

Tested sample: 1

Assessment of appearance change: better than photostandard

Evaluation

The specimen fulfills the requirements of EN 1963 or 1307.

2.7 Determination of the basic requirements of textile floor coverings

Test conditions

According to EN 1307:2014 accr.)

Test results

Tested sample: 1

	Basic requirements	Test results
Colour fastness to ^{a)}		
♦ Light	≥ 5 (natural fibres ≥ 4)	Conformity has to be declared by the manufacturer for each colour
♦ Rubbing		
- dry	≥ 3-4	
- wet	≥ 3	
♦ Water – Change in colour		
- plain carpets	≥ 3-4	
- patterned carpets	≥ 4	
♦ Water – staining		
- all carpets	≥ 2-3	

^{a)} Conformity has to be declared by the manufacturer for each colour.

Fibre bind for carpets < 80 % natural fibres		
♦ Loop pile carpets	Fuzzing below level of reference photographs	better than photographs

Judgement

The tested material fulfills the basic requirements of pile carpets according to EN 1307.



2.8 Determination of changes in appearance – Drum Test

Test conditions

According to EN 1307 and ISO/TR 10 361 ^{accr.)}

Assessment according EN 1471

Number of drum revolutions: 5 000 and 22 000

Number of specimens: 1

Test results

Tested sample: 1

	5 000 revolutions	22 000 revolutions
Index of appearance change (median)	4.5	4.0
Index of colour change (median)	4 - 5	4
Main reasons for change	structure	structure
Index after colour correction (median)	4.5	4.0
Index after colour correction (mean)	4.4	4.0
Damages by the treatment	none	

Assessment indices: Index 1 – high change, Index 5 – no change



2.9 Classification of textile floor coverings

Test conditions

According to EN 1307:2014 accr.)

Test results

Tested sample: 1

Index of appearance change according to ISO 10361	♦ Short time test	4.5
	♦ Long time test	4.0
Pile density *)		-- g/cm ³

*) only required for class 32 for textile floor coverings with $\geq 80\%$ natural fibers.

Classification

Change in appearance	Class 33
Overall use class	Class 33
Luxury rating class	LC 2

Explanation:

Textile floor coverings are classified to their suitability in different use classes. The tested and mentioned characteristics used to describe the use behaviour in dependence to the intensity of use. The different use classes are described as followed:

Domestic		Commercial	
Class	Use intensity	Class	Use intensity
21	light	31	light
22	medium	32	medium
23	heavy	33	heavy

Textile floorcoverings are classified into following luxury rating classes.

Luxury rating class	"luxury value"
LC 1	plain
LC 2	good
LC 3	high
LC 4	luxurious
LC 5	prestige



2.10 Determination of the castor chair suitability of textile floor coverings

Test conditions

According to EN 985, Method A ^{accr.})

Test apparatus: castor chair test equipment, Typ: Feingerätebau Baumberg

Castors: according EN 985

Test results

Tested sample: 1

Test duration	change of attribute	Index of colour change *)	Index of appearance change *)
5 000 revolutions	structure	4 - 5	4.0
25 000 revolutions	structure	4	3.0
Castor chair index (r)	3.8		

*) Note: Index 1 - high change / Index 5 - no change

Damages by the treatment: none

Classification

According the specifications of **EN 1307** the specimen can be classified as:

"suitable for intensive use"

2.11 Classification of the suitability for use on stairs

Test conditions

According to EN 1963; Test methode B: nosing test ^{accr.})

Test results

Tested sample: 1

Appearance change*) in the edge area	low appearance change
---	------------------------------

*)complete mean

Classification

According to EN 1307 the specimen can be classified as suitable

"for intensive use"

Note: A workmanlike construction of the stair nose with a rounding radius of at least 10 mm is presupposed to the judgement.



2.12 Determination of the resistance to fraying

Test conditions

Testing according to EN 1814 ^{accr.})
Number of test samples: 4
Kind of test sample: Sheet materials

Test results

Tested sample: 1

Description of cut edge after treatment:

Delamination	not occurred
Fraying	not occurred
Tuft loss / sprouting	not occurred
Thread puller	not occurred
Release of fibers from the pile material	not occurred
No change	accurate

Judgement

The tested specimen can be classified as **resistant to fraying**.

2.13 Assessment of static electrical propensity – walking test

Test conditions

According to ISO 6356 ^{accr.})
Testing atmosphere: 23 °C / 25 % rel. humidity
Base plate: Isolating rubber mat on metal plate
Sole-material: XS-664P Neolite
Pretreatment: none

Test results

Tested sample: 1

Supplied condition			
Measurement 1	Measurement 2	Measurement 3	Mean value
+ 0.1 kV	+ 0.1 kV	± 0.0 kV	+ 0.1 kV

Judgement

The tested sample in supplied condition can be classified as **antistatic** according EN 14041:2004.



2.14 Determination of electrical resistances

Test conditions

According to ISO 10965 accr.)

Test atmosphere: $23^{\circ}\text{C} \pm 1^{\circ}\text{C}$ / $25\% \pm 3\%$ rel. humidity

Circuit voltage: 500 V

Test results

Tested sample: 1

Sample	Measurement	Vertical resistance
1	1	$2.0 \times 10^{10} \Omega$
	2	$1.8 \times 10^{10} \Omega$
2	1	$1.8 \times 10^{10} \Omega$
	2	$2.0 \times 10^{10} \Omega$
3	1	$1.8 \times 10^{10} \Omega$
	2	$1.6 \times 10^{10} \Omega$
Geometric mean value		$1.8 \times 10^{10} \Omega$



2.15 Summarized test report

According to EN 1307:2014 ^{accr.}, Annex B

Identification, basic information	
Productname	"ege Tuft 950 WT"
Date	2015-02-11
Manufacturer / User	EGETAEPER A/S
Type of face side	Loop pile (reference according to B.2.2: A4)
Manufacturing procedure	Tufted (reference according to B.2.1: M5)
Backing	Textile backing (reference according to B.2.4: S10)
Type of floor covering	Pile carpet
Base	Non-woven fabric (reference according to B.2.3: P3)
Colouration	multicoloured unpatterned (reference according to B.2.5: C3)
Fibres of pile	100 % Polyamide (according to the applicant)
Total mass	2590 g/m ²
Pile mass above the substrate	573 g/m ²
Total thickness	6.6 mm
Pile height	3.8 mm
Surface pile density	0.151 g/cm ³
Number of tufts or loops	2201 /dm ²
Vettermann-drum test, short time testing	4.5
Vettermann-drum test, long time testing	4.0
Basic requirements	fulfilled
Use class	
Classification of change in appearance	Class 33
Level of use classification	Class 33
Comfort-Class	LC1
Additional properties	
Castor chair suitability	suitable for intensive use
Stair suitability	suitable for intensive use
Body voltage from the walk test	+ 0.1 kV
Vertical resistance	1.8 x 10 ¹⁰ Ω
Resistance to fraying	resistant to fraying



3 Remarks

Validity

There are no regulations concerning duration of validity in the individual test standards. As the results of the examinations refer only to the submitted and examined samples, the report is valid for these for an unlimited period. A period of validity specified as part of an expert evaluation is in the discretion of the consultant or the ÖTI.

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Sample Material

Results of performed tests only refer to the sample material provided.

Without explicit written other agreement testing is destructive and the sample material is transferred to the property of ÖTI, which is entitled to freely decide on storage and disposal.

Issuance

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Quality management, Accreditation and Notification

This issue is a rewriting of report 081086.2, dated 2015-07-16.

All tests and services are performed under a quality management system according to EN ISO/IEC 17025 respectively EN ISO/IEC 17065.



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