

LABORATORY OF TESTING TEXTILE RAW MATERIALS AND FABRICS
Testing Laboratory accredited by the Polish Centre for Accreditation

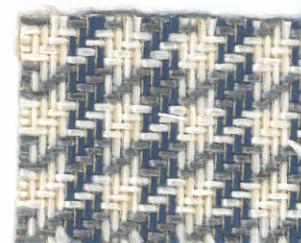
TEST CERTIFICATE NO. BM 12.6.2.1 / 2018 / B / A

1. **Test ordered by:** „TOPTEXTIL” Sp. z o.o. , 12 Wadowicka Street; 30-415 Kraków
2. **Name and description of tested material:** the sample: **the upholstery fabric KENIA, declared raw material composition: 67% Olefin, 33% Polyester**
3. **Date of receiving material for testing:** 2018-04-19
4. **Date of test performance:** 2018-04-26
5. **Samples taken by:** correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
6. **Tests carried out according to:** methods presenting in testing table

Results of Laboratory Tests

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Test performed by: Elżbieta Olczak



1. *Test results refer only to the tested material.*
2. *Neither of the parts of this Test Certificate can be copied without written permission of the Head of the Laboratory; it can be copied only as a whole document.*
3. *Test Certificate presents test results included within accreditation field of testing.*
4. *Test results not included in accreditation scope, if occur, are marked with *) in the test results table, at the parameter name.*
5. *Measurement uncertainty, if it is specified, has been determined according to the recommendations presented in document EA-4/16. Presented values of uncertainty constitute expanded uncertainty at 95% confidence level and coverage factor $k = 2$.*

Certificate date: 2018-04-27

Number of Certificate copies: 2

Test Certificate handed to:

- 1) TOPTEXTIL Sp. z o.o., Kraków - 1 copy.,
- 2) Laboratory of Testing Textile Raw Materials and Fabrics - 1 copy.

Certificate prepared by:

Patrycja Bąk

Person authorizing the Test Certificate:

Name and surname:

Function:

Signature

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
Instytut Włókiennictwa
mgr inż. Jerzy Andrysiak

INSTYTUT WŁÓKIENNICZWA
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
92-103 Łódź, ul. Brzezinska 5/15

TEST CERTIFICATE NO. BM 12.6.2.1 / 2018 / B / A

Parameter	Value	Remarks
Seam slippage resistance, mm: <u>Warp</u> The mean value of seam slippage resistance for warp direction, mm - individual results, mm <u>Weft</u> The mean value of seam slippage resistance for weft direction, mm - individual results, mm	 4 4; 4,5; 5; 4; 4 5 5; 3,5; 3,5; 5,5; 5,5	PN-EN ISO 13936-2:2005 the conditioned sample, tensile machine: Hounsfield H50 KM, testing force: 180 N, 100% PES sewing threads (74 ± 5) tex, the number of sewing needle: 110 the number of stitch: 32±2/100 mm rate of extension: 50 mm/min. number of test specimens: 5
Evaluation: according to PN-EN 14465:2005 + A1:2007 requirements level: A category: ≤ 4 mm; B category: ≤ 6 mm; C category: ≤ 8 mm		

_____ The end of Test Certificate _____

Person authorizing the Test Certificate

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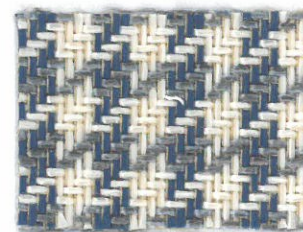
TEST CERTIFICATE NO. BM 12.6.2.2 / 2018 / B / A

1. **Test ordered by:** „TOPTEXTIL” Sp. z o.o. , 12 Wadowicka Street; 30-415 Kraków
2. **Name and description of tested material:** the sample: **the upholstery fabric KENIA, declared raw material composition: 67% Olefin, 33% Polyester**
3. **Date of receiving material for testing:** 2018-04-19
4. **Date of test performance:** 2018-04-23÷25
5. **Samples taken by:** correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
6. **Tests carried out according to:** methods presenting in testing table

Results of Laboratory Tests

see page 2/2

Test performed by: Danuta Ławniczak



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TEST CERTIFICATE NO. BM 12.6.2.2 / 2018 / B / A

Parameter		Value	Remarks
Abrasion resistance, number of rubs	color change after 3 000 rubs, grade of grey scale	4 - 5	PN-EN ISO 12947-2:2017-02 + PN-EN 14465:2005+A1:2007, Annex A the conditioned sample, the abradant: the standard woolen fabric, the nominal pressure used in the test: 12 kPa, magnification factor in the magnifying device: 8, in holders used foam. <u>Criterion of destruction of the testing specimens in accordance with that standard:</u> three threads completely broken
	1 specimen	25 000	
	2 specimen	30 000	
	3 specimen	25 000	
	4 specimen	25 000	
	Total abrasion resistance (the lowest individual result)	25 000	

Evaluation: according to PN-EN 14465:2005 + A1:2007: A category: number of rubs $\geq 35\ 000$ rubs,
B category: number of rubs: $12\ 000 \div 30\ 000$, C category: number of rubs: $4\ 000 \div 10\ 000$

_____ The end of Test Certificate _____

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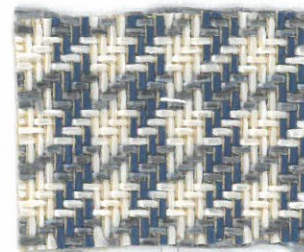
TEST CERTIFICATE NO. BM 12.6.2.3 / 2018 / B / A

1. **Test ordered by:** „TOPTEXTIL” Sp. z o.o., 12 Wadowicka Street; 30-415 Kraków
2. **Name and description of tested material:** the sample: **the upholstery fabric KENIA, declared raw material composition: 67% Olefin, 33% Polyester**
3. **Date of receiving material for testing:** 2018-04-19
4. **Date of test performance:** 2018-04-25
5. **Samples taken by:** correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
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Results of Laboratory Tests

see page 2/2

Test performed by: Elżbieta Olczak



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Patrycja Bąk

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TEST CERTIFICATE NO. BM 12.6.2.3 / 2018 / B / A

Parameter		Value	Remarks
Propensity to surface fuzzing and pilling, grade	<i>the number of rubs</i>		PN-EN ISO 12945-2:2002 (modified Martindale method) the conditioned sample, the abradant: the standard woolen fabric; mass of weight: 415 ± 2 g;
	500	5	
	1 000	5	
	2 000	5 No change	
	5 000	5	
<u>Evaluation</u> according to PN-EN 14465:2005+A1:2007: A category: grade ≥ 4 – 5; B category: grade 4; C category: grade 3 – 4; D category: grade 3			

_____ The end of Test Certificate _____

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