

**Laboratorium Badań Surowców
i Wyrobów Włókienniczych**Siedziba: ul. Brzezińska 5/15, 92-103 Łódź, tel. +48(0) 42 6163140
Siedziba: ul. Gdańska 118. 90-520 Łódź. tel. +48(0) 42 2534421

AB 164

LABORATORY OF TESTING TEXTILE RAW MATERIALS AND FABRICS
Testing Laboratory accredited by the Polish Centre for Accreditation**TEST CERTIFICATE NO. BM 2.11.2.2 / 2015 / B / A**

1. **Test ordered by:** „TOPTEXTIL” Sp. z o.o. ,Wadowicka Str.12; 30-415 Kraków
2. **Name and description of tested material:** the sample: *the upholstery product GRANADA*, declared raw material composition: 100 % Polyester
3. **Date of receiving material for testing:** 16.07.2015
4. **Date of test performance:** 05.08.2015
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: 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: 18.08.2015**Number of Certificate copies:** 2**Test Certificate handed to:**

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

Certificate prepared by:

Patrycja Bąk

Person authorizing the Test Certificate:

Name and surname: Jerzy Andrysiak

Function: Deputy Head of the Laboratory

Signature:

Laboratorium Badań Surowców
i Wyrobów Włókienniczych
Instytut Włókiennictwa

mgr inż. Jerzy Andrysiak

-verte-


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

TEST CERTIFICATE NO. BM 2.11.2.2 / 2015 / B / A

Parameter	Value	Remarks	
Abrasion resistance, number of rubs	color change after 3 000 rubs, grade of grey scale	PN-EN ISO 12947-2:2000 + AC:2006 + PN-EN 14465:2005+A1:2007, Annex A <i>Test conditions:</i> the abradant: the standard woollen 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> Local wiping of the cover on the surface 5 mm ²	
	1 specimen		4 - 5
	2 specimen		25 000
	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 45 000 rubs, B category: number of rubs: 25 000 \div 40 000, C category: number of rubs: 10 000 \div 20 000			

_____ The end of Test Certificate _____

Person authorizing the Test Certificate

Zastępca Kierownika
Laboratorium Białej Surowców
i Włókien Włókienniczych
Instytut Włókiennictwa

mgr inż. Jerzy Andrysiak

TEST CERTIFICATE NO. BM 2.11.2.1 / 2015 / B

Parameter	Value	Remarks
Seam slippage resistance, mm: <u>Warp</u> The mean value of seam slippage resistance for lengthwise direction, mm - individual results, mm <u>Weft</u> The mean value of seam slippage resistance for crosswise direction, mm - individual results, mm	 3 3; 3,5; 3,5; 3,5; 3 3 3; 3; 3; 4; 4	PN-EN ISO 13936-2:2005 <i>Test conditions:</i> tensile tester: 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 testing specimens: 5

_____ **The end of Test Certificate** _____

Person authorizing the Test Certificate

Zastępca Kierownika
 Laboratorium Badań Surowców
 i Wyrobów Włókienniczych
 Instytut Włókiennictwa

mgr inż. Jerzy Andrysiak

TEST CERTIFICATE NO. BM 2.11.2.3 / 2015 / B / A

Parameter		Value	Remarks
Propensity to surface fuzzing and pilling,	<i>the number of rubs</i>		PN-EN ISO 12945-2:2002 (modified Martindale method) <i>Test conditions</i> the abradant;; the standard woolen fabric mass of weight: 415 ± 2 g;
	500	5	
	1 000	5	
	2 000	4 - 5 Slight surface fuzzing	
Evaluation 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** _____

Person authorizing the Test Certificate

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

Laboratorium Badań Surowców i Wyrobów Włókienniczych

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 Siedziba: ul. Gdańska 118. 90-520 Łódź. tel. +48(0) 42 2534421

LABORATORY OF TESTING TEXTILE RAW MATERIALS AND FABRICS

TEST CERTIFICATE NO. BM 2.11.2.4 / 2015 / B

1. **Test ordered by:** „TOPTEXTIL” Sp. z o.o., Wadowicka Str.12; 30-415 Kraków
2. **Name and description of tested material:** the sample: *the upholstery product GRANADA*, declared raw material composition: 100 % Polyester
3. **Date of receiving material for testing:** 16.07.2015
4. **Date of test performance:** 05.08.2015
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

Parameter	Value	Remarks
The mean of bursting strength, kPa	648	PN-EN ISO 13938-1:2002 (hydraulic method)
The mean of height at burst, mm	9,4	<i>Test conditions:</i> <i>test area: 50 cm² ; time at burst: (20 ± 5) s</i>
<u>Evaluation</u> according to PN-EN 14465:2005+A1:2007: A category: bursting strength ≥ 600 kPa; B category: bursting strength ≥ 400 kPa; C category: bursting strength ≥ 200 kPa		

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. *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: 18.08.2015

Number of Certificate copies: 2

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

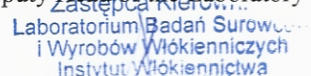
Certificate prepared by:
 Patrycja Bąk

The end of Test Certificate

Person authorizing the Test Certificate:

Name and surname: Jerzy Andrysiak

Function: Deputy Head of the Laboratory

Signature: 
 Zastępca Nierówn...
 Laboratorium Badań Surowców
 i Wyrobów Włókienniczych
 Instytut Włókiennictwa

mgr inż. Jerzy Andrysiak

TEST CERTIFICATE NO. BM 2.11.2.5 / 2015 / G / A

Parameter	Value	Remarks
Resistance to surface wetting (Spray test), degree	1 specimen	3 wetting of the specimen face at spray points
	2 specimen	2 – 3 wetting of the specimen face at spray points and partial wetting of the specimen face beyond the spray points
	3 specimen	3

PN-EN ISO 4920:2013-02 test were carried out in normal climate conditions; water temperature: 20°C;
Assessment scale:
Sprinkle degree 5 – no sticking or wetting of the specimen face, **Sprinkle degree 0** – complete wetting of the entire face of the specimen

_____ The end of Test Certificate _____

Person authorizing the Test Certificate

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
Instytut Włókiennictwa

mgr inż. Jerzy Andrysiak



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INSTYTUT WŁÓKIENICTWA
Textile Research Institute



AB 077

Laboratory of Chemical Testing and Instrumental Analysis

Accredited by Polish Center for Accreditation for the testing specified in Scope of Accreditation No AB 077

92-103 Lodz, Brzezińska 5/15 Street
phone no. (0-42) 61-63-130 (120, 128), fax (0-42) 61-63-131
e-mail: jpiestrzeniewicz@iw.lodz.pl, labchem@iw.lodz.pl

Łódź 7th August 2015

L - 428/2015

TEST CERTIFICATE No BCH 414/998/2015/A

- Name and address of the principal:** „TOPTEXTIL” Sp. z o.o.
ul. Wadowicka 12, 30 – 415 Kraków
- Name and description of tested sample:** sample of furniture upholstery fabric GRANADA – material composition: 100% Polyester
- Date of receiving sample for testing:** 17.07.2015
- Date of performance of testing:** 22.07. – 07.08.2015
- Sampling:** by Client personally

RESULTS OF THE TESTS

Property of investigation	Results	Testing method	Test conditions	Level of requirements for categories according to PN-EN 14465:2005 + A1:2007		
				A	B	C
Colour fastness to rubbing:			<u>Acclimatization conditions:</u> temperature: (20,0±2)°C; relative humidity: (65,0±2)%; time: 4h;			
- Dry ¹⁾ weft warp	a/ 4-5 a/ 4-5	PN-EN ISO 105-X12:2005	<u>Test conditions:</u> ambient temperature; rubbing pick: Ø 16±0,1mm; push: 9±0,2 N; degree of moisturising of rubbing to fabric: 100%	≥ 4-5	4	3-4
- Wet weft warp	a/ 4-5 a/ 4-5			≥ 3-4	3	2-3

¹⁾ Colour fastness according to “Grey scale”, indicator “5” means – no change in colour, indicator “1” means – big change in colour
b/ staining rubbing to cotton

Remarks:

- In accordance with ISO ILAC-IAF (January 2009) Communicate available on www.pca.gov.pl, laboratory accreditation referring to ISO/IEC 17025:2005 means fulfilling the demands concerning technical laboratory competence and managing system, which are required to ensure technical reliable results of the tests.
- Test results refer only to the tested material.
- Neither of the parts of this test certificate can be copied without written permission of the Head of the Laboratory.
- Total number of pages of the test certificate 1.

Test authorized by:
Wiesława Lota, M.Sc. Eng.

W. Lota

Confirmed by:

LABORATORIUM BADAŃ CHEMICZNYCH
I ANALIZ INSTRUMENTALNYCH
KIEROWNIK
W. Lota
mgr inż. Jerzy Piestrzeniewicz

Number of copies: 4
The test certificate receive:

- Customer – 2 copies
- IW – Laboratory of Chemical Testing and Instrumental Analysis – 1 copy
- IW – Laboratory of Testing Textile Raw Materials and Fabrics – 1 copy



AB 077

Laboratory of Chemical Testing and Instrumental Analysis

Accredited by Polish Center for Accreditation for the testing specified in Scope of Accreditation No AB 077

92-103 Lodz, Brzezińska 5/15 Street
 phone no. (0-42) 61-63-130 (120, 128), fax (0-42) 61-63-131
 e-mail: jpiestrzeniewicz@iw.lodz.pl, labchem@iw.lodz.pl

Łódź 7th August 2015

L - 428/2015

TEST CERTIFICATE No BCH 414/998/2015/A/1

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ul. Wadowicka 12, 30 – 415 Kraków
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- Date of receiving sample for testing:** 17.07.2015
- Date of performance of testing:** 22.07. – 07.08.2015
- Sampling:** by Client personally

RESULTS OF THE TESTS

Property of investigation	Results	Testing method	Test conditions	Level of requirements for categories according to PN-EN 14465:2005 + A1:2007		
				A	B	C
Colour fastness to: - artificial light ²⁾	a/ 3-4	PN-EN ISO 105-B02:2013 Method 2	Device: Xenotest Alpha + <u>Light conditions:</u> - wavelength: 300-400nm - filters: 7IR - BST temperature = 47 ± 3 °C - chamber temperature: 45 ± 3 °C - RH = 40% Estimation: Multilight chamber, light D65	≥ 6	≥ 5	≥ 4

¹⁾ Colour fastness according to “Blue scale”, indicator “8” means – no change in colour, indicator “1” means – big change in colour
 a/ change of colour

Remarks:

- In accordance with ISO ILAC-IAF (January 2009) Communicate available on www.pca.gov.pl, laboratory accreditation referring to ISO/IEC 17025:2005 means fulfilling the demands concerning technical laboratory competence and managing system, which are required to ensure technical reliable results of the tests.
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 Wiesława Lota, M.Sc. Eng.

W. Lota

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Confirmed by:

LABORATORIUM BADAŃ CHEMICZNYCH
 I ANALIZ INSTRUMENTALNYCH
 KIEROWNIK
mgr inż. Jerzy Piestrzeniewicz