Laboratory of Testing Textile Raw Materials and Fabrics

92-103 Lodz, 5/15 Brzezinska Str., phone 48 42 6163142, fax 48 42 6792638 90-520 Lodz, 118 Gdanska Str., phone 48 42 2534419, fax 48 42 2534490

e-mail: bwitkowska@iw.lodz.pl,krolikowska@iw.lodz.pl,

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AB 164

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

TEST CERTIFICATE NO. BM 4.1.3.3 / 2017 / 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 BIZON, declared raw material composition: 100 % Polyester
- 3. Date of receiving material for testing: 2017-01-04
- 4. Date of test performance: 2017-01-18
- 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
- 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: 2017-01-19 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 Bak MSc Eng

Person authorizing the Test Certificate:

Name and surname: Patrycja Bak MSc Eng

Function: Deputy Technical Head

of Laboratory 5/15 Brzezińska Street

Signature

ASTYTUT WŁÓKIENIVICTW Badań Strowcó -aboratori:

-verte-

TEST CERTIFICATE NO. BM 4.1.3.3 / 2017 / B / A

Parameter		Value	Remarks
	color change after 3 000 rubs, grade of grey scale	4 - 5	PN-EN ISO 12947-2:2000 + AC:2006 + PN-EN 14465:2005+A1:2007, Annex A <i>Test conditions:</i>
Abrasion resistance, number of rubs	1 specimen	25 000	the abradant: the standard woollen fabric, the nominal pressure used in the test: 12 kPa
	2 specimen	35 000	magnification factor in the magnifying device: 8,
	3 specimen	45 000	in holders used foam. Criterion of destruction of the testing specimens in accordance with that standard:
	4 specimen	40 000	three threads completely destroyed
	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 o	f Test	Certificate	

Person authorizing the Test Certificate

Name and surname: Patrycja Bąk MSc Eng

Function: Deputy Technical Head

of Laboratory 5/15 Brzezińska Street

Signature

TEST CERTIFICATE NO. BM 4.1.3.2 / 2017 / B / A

Parameter		Value	Remarks				
Propensity to surface fuzzing	the number of rubs	5	PN-EN ISO 12945-2:2002 (modified Martindale method)				
and pilling,	1 000	4 - 5	Test conditions: the abradant: the standard woolen fabric;				
	2 000	4 Slight surface fuzzing and partially formed pills	mass of weight: 415 ± 2 g;				
Evaluation according	g to_PN-EN 14465:2005	5+A1:2007: A category: g	rade $\geq 4-5$; B category: grade 4				
C category: grade 3	-4; D category: gr	ade 3					

The end of Test Certificate	
The cha of Test Certificate	

Person authorizing the Test Certificate

Name and surname: Patrycja Bąk MSc Eng

Function: Deputy Technical Head

of Laboratory 5/15 Brzezińska Street

Signature B

TEST CERTIFICATE NO. BM 4.1.3.1 / 2017 / B / A

Parameter	Value	Remarks			
Seam slippage resistance, mm:		PN-EN ISO 13936-2:2005 Test conditions:			
The mean value of seam slippage resistance for warp direction, mm	2	tensile tester: Hounsfield H50 KM, testing force: 180 N, 100% PES sewing threads (74 ± 5) tex			
- individual results, mm	2,5; 2; 2; 1,5; 2	the number of sewing needle: 110 the number of stitch: 32±2/100 mm			
Weft The mean value of seam slippage resistance for	2	rate of extension: 50 mm/min. number of test specimens: 5			
weft direction, mm - individual results, mm	1,5; 2; 2,5; 2; 2				

Eval	luat	tion	1:

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	in Entrie La mana

Person authorizing the Test Certificate

Name and surname: Patrycja Bąk MSc Eng Function: Deputy Technical Head of Laboratory 5/15 Brzezińska Street

Signature 3







AB 077

Laboratory of Chemical Testing and Instrumental Analysis

92-103 Lodz, 5/15 Brzezinska Str. phone no. +48 42 6163130 (120, 128), fax +48 42 6163131 e-mail: <u>ipiestrzeniewicz@iw.lodz.pl</u>, <u>labchem@iw.lodz.pl</u>

Łódź 20th of January 2017

L - 8/2017

ŚWIADECTWO Z BADAŃ nr BCH 8/28/2017/A/1

1. Name and address of the principal: "TOPTEXTIL" Sp. z o.o.

ul. Wadowicka 12, 30 - 415 Kraków

2. Name and description of tested sample: sample of furniture upholstery fabric BIZON - declared material

composition: 100 % Polyester

3. Date of receiving sample for testing: 09.01.2017

4. Date of performance of testing: 19.01. - 20.01.2017

5. Sampling: sample in a proper size, in a proper condition for research, supplied by the client

RESULTS OF THE TESTS

Property of investigation	Results	Testing method	Test conditions	Level of requirements for categories according to PN-EN 15618:2009 + A1:2012		
				A	В	
Colour fastness to: - artificial light ²⁾	a/ 3	PN-EN ISO 105- B02:2014-11 Method 2	Device: Xenotest Alpha + <u>Light conditions:</u> - wavelenght: 380-750 nm - filters: 7IR - BST temperature = 47 ± 3 °C - chamber temperature: 45 ± 3 °C - RH = 40% Estimation: Multilight chamber, light D65	≥6	≥ 5	

²⁾ 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.

2. Test results refer only to the tested material.

3. Neither of the parts of this test certificate can be copied without written permission of the Head of the Laboratory.

4. Total number of pages of the test certificate 1.

Test authorized by:

Zdzisława Mrozińska, M.Sc. Eng.

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

Confirmed by:

LABORATORIUM BADAŃ CHEMICZNYCH I ANALIZ INSTRUMENTALNYCH KIEROWNIK TECHNICZNY ds. Badań Chemicznych i Odporności Wybarwień

mgr inż. Katarzyna Chylewska







AB 077

Łódź 20th of January 2017

Laboratory of Chemical Testing and Instrumental Analysis

92-103 Lodz, 5/15 Brzezinska Str. phone no. +48 42 6163130 (120, 128), fax +48 42 6163131 e-mail: jpiestrzeniewicz@iw.lodz.pl, labchem@iw.lodz.pl

L - 8/2017

ŚWIADECTWO Z BADAŃ nr BCH 8/28/2017/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 BIZON declared material composition: 100 % Polyester
- 3. Date of receiving sample for testing: 09.01.2017
- 4. Date of performance of testing: 19.01. 20.01.2017
- Sampling: sample in a proper size, in a proper condition for research, supplied by the client

RESULTS OF THE TESTS

Property of investigation	I RACIIIIC I II		Testing method	Test conditions	Level of requirements for categories according to PN-EN 15618:2009 + A1:2012			
III v esergueron					A	В		
Colour fastness to rubbing: - Dry ¹⁾ longitudinal direction cross direction - Wet longitudinal direction cross direction	a/ a/ a/	4-5 4-5 4 4-5	PN-EN ISO 105- X12:2005	Acclimatization conditions: temperature: (20,0±2)°C; relative humidity: (65,0±2)%; time: 4h; Test conditions: ambient temperature; rubbing pick: Ø 16±0,1mm; push: 9±0,2 N; degree of moisturising of rubbing to fabric: 100%	≥ 4-5 ≥ 4	≥ 4		

¹⁾ Colour fastness according to "Grey scale", indicator "5" means - no change in colour, indicator "1" means - big change in colour staining rubbing to cotton a/

Remarks:

- 1. 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:

Zdzisława Mrozińska, M.Sc. Eng.

Number of copies: 4 The test certificate receive:

- Customer 2 copies
- IW Laboratory of Testing Textile Raw Materials and Fabrics 1 copy

- IW - Laboratory of Chemical Testing and Instrumental Analysis - 1 copy

Confirmed by:

LABORATORIUM BADAN CHEMICZNYCH I ANALIZ INSTRUMENTALNYCH KIEROWNIK TECHNICZNY ds. Badań Chemicznych i Odporności Wybarwień

mgr inż. Katarzyna Chylewska



Laboratory of Flammability Testing

90-520 Lodz, 118 Gdanska Str. phone 48 42 2534435 (436), fax 48 42 2534490

e-mail: mszejna@iw.lodz.pl



AB 029

TEST CERTIFICATE ON FLAMMABILITY TESTING OF UPHOLSTERY COMPOSITE

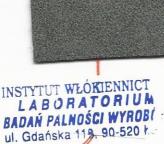
No 11 / BP / 17

Test method:

PN-EN 1021-1:2014-12 Furniture. Assessment of the ignitability of upholstered furniture. Part 1: Ignition source smouldering cigarette.

Orderer:

TOPTEXTIL Sp. z o.o. ul. Wadowicka 12 30-415 Kraków



Subject of testing:

Upholstery composite:

- upholstery fabric for furniture named BIZON composition: 100% polyester
- CM-3040 polyurethane flame-retardant foam

Testing sample with the correct size, in appropriate state for testing, supplied by the Orderer with its characteristic and without the Sampling Protocol.

Results of testing:

Standard	Test method	Result
PN-EN 1021-1:2014-12	Ignition source: smouldering cigarette	Neither progressive smouldering ignition nor flaming ignition occurred.

The above test results relate only to the ignitability of the combination of materials under the particular conditions of test; they are not intended as a means of assessing the full potential fire hazard of the materials in use.

Tests performed by:

Andrzej Kubacki, technician

Sample received on: Test performed on:

05.01.2017 16.01.2017 Test Certificate authorized by:

Laboratorium Badań Palności Wyrobów KIEROWNIK

mgr Inż. Małgorzata Szejna Frow. no. 81

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NOTES:

- 1. The Testing results refer only to the tested sample.
- 2. Test Certificate consists of 2 pages.
- 3. Test Certificate must not be reproduced in another way, than as a whole without a prior written consent of the Testing Laboratory.
- The Orderer using this Test Certificate is responsible for the conformity between the product and sample submitted for

DETAILED TESTING RESULTS

Climate conditions: temperature (23 ± 2) °C; humidity (50 ± 5) %; time 24 h

Testing conditions: temperature 22 °C; humidity 30 %

Preparation of test samples:

the upholstery fabric, exposed to wetting in water and drying procedure, in accordance with Appendix D of the norm PN-EN 1021-1:2014-12.

Upholstery composite characteristic:

Upholstery composite of:

- upholstery material named BIZON composition: 100% polyester

- CM-3040 polyurethane flame-retardant foam

	Criteria		Cigarette				Remarks			
			2	3	Kemarks					
	Unsafe escalating combustion	NO	NO	z -		M	vimur	n cigar	ette	
Test assembly consumed		NO	NO	-	Maximum cigarette smouldering time:					
C 1 d	Smoulders to extremities	NO	NO	-	17 minutes 03 seconds					
Smouldering criteria	Smoulders through thickness	NO	NO	-						
CITICITA	Smoulders more than 1 hour	NO	NO	-	Maximum upholstery composite destruction:					
	In final examination, presence of active smouldering	NO	NO	-						
Flaming criteria Occurrence of flames					horiz	zontal [r	nm]	ver	tical [m	m]
		NO	NO	-	length 70	width	depth	length 68	width	depth 6

Result of testing: Neither progressive smouldering ignition nor flaming ignition occurred.



END OF THE TEST CERTIFICATE