



**Łukasiewicz**

**Instytut Włókiennictwa  
Laboratory of Testing Raw Materials, Textiles  
and Electrostatic Properties**

Łukasiewicz Research Network – Textile Research Institute,  
92-103 Łódź, 5/15 Brzezińska Str., phone 48 42 6163142, fax 48 42 6792638  
90-520 Łódź, 118 Gdańska Str., phone 48 42 2534419, fax 48 42 2534490  
e-mail: [beata.witkowska@iw.lukasiewicz.gov.pl](mailto:beata.witkowska@iw.lukasiewicz.gov.pl),  
[jerzy.andrysiak@iw.lukasiewicz.gov.pl](mailto:jerzy.andrysiak@iw.lukasiewicz.gov.pl)



AB 164

**Testing Laboratory accredited by the Polish Centre for Accreditation**

**TEST REPORT NO. BM 250.3 / 2021 / B / A**

- Test ordered by:** X „TOPTEXTIL” Sp. z o.o., 29 Mickiewicza Street, 34-100 Wadowice
- Name and description of tested material:** the sample: X **the upholstery woven fabric BALOO**, declared raw material composition: 93% Polyester, 6% Acrylic, 1% Cotton.
- Date of receiving material for testing:** 2021-04-27
- Date of test performance:** 2021-05-13
- Samples taken by:** X correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
- Tests carried out according to:** methods presenting in testing table

**Results of Laboratory Tests**

see page 2/2

**Test performed by:** Małgorzata Frołow

- Test results refer only to the tested material.
- Neither of the parts of this Test Report can be copied without written permission of the Head of the Laboratory; it can be copied only as a whole document.
- Test Report presents test results included within accreditation field of testing.
- Test results not included in accreditation scope, if occur, are marked with\* in the test results table, at the parameter name.
- Test Report consists of test results carried out in location 90-520 Łódź, ul. Gdańska 118 (G) / 92-103 Łódź, ul. Brzezińska 5/15 (B).
- Measurement uncertainty, if it is specified, has been determined according to the recommendations presented in the standard EA-4/16. Presented values of uncertainty constitute expanded uncertainty at 95% confidence level and coverage factor  $k = 2$ .
- Laboratory uses the requirements of ILAC-G8:09/2019. The conformity statement of test result with requirements specification takes place, when the test results together with expanded uncertainty does not exceed the tolerance limit in the specification. The conformity statement's rules given by Client could be allowed.



Sieć Badawcza Łukasiewicz-  
Instytut Włókiennictwa  
LABORATORIUM BADAŃ SUROWCÓW  
WYROBÓW WŁÓKIENNICZYCH  
I WŁASNOŚCI ELEKTROSTATYCZNYCH  
92-103 Łódź, Brzezińska 5/15  
tel. 42 61 63 142, fax 42 67 92 638



**Test Report date:** 2021-04-14

**Number of Test Report 's copies:** 2

**Test Report handed to:**

- „TOPTEXTIL” Sp. z o.o., Wadowice - 1 copy,
- Laboratory of Testing Raw Materials, Textiles and Electrostatic Properties (location: 5/15 Brzezińska str.) - 1 copy.

**Test Report prepared by:**  
Patrycja Bąk

**Person authorizing the Test Report:**

Laboratorium Badań Surowców, Wyróbów  
Włókienniczych i Własności Elektrostatycznych  
GŁÓWNY SPECJALISTA  
Z-CIA KIEROWNIKA

*mgr inż. Jerzy Andrysiak*

TEST REPORT NO. BM 250.3 / 2021 / B / A

Parameter	Value	Remarks
<b>Seam slippage resistance, mm:</b> <u>Warp</u> <b>The mean value of seam slippage resistance for warp direction, mm</b> - individual results, mm  <u>Weft</u> <b>The mean value of seam slippage resistance for weft direction, mm</b> - individual results, mm	<p style="text-align: center;"><b>2 ± 0</b></p> <p style="text-align: center;">3; 2; 2; 2; 2</p> <p style="text-align: center;"><b>3 ± 0</b></p> <p style="text-align: center;">3; 4; 4; 3; 3</p>	PN-EN ISO 13936-2:2005 sample conditioned according to PN-EN ISO 139:2006 + A1:2012, temp. 20° C ± 2 °C, RH: 65% ± 4%, 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 test specimens: 5
<b>Evaluation:</b> according to PN-EN 14465:2005 + A1:2007 requirements level: <b>A category: ≤ 4 mm;</b> B category: ≤ 6 mm; C category: ≤ 8 mm		

Person authorizing the Test Report

Laboratorium Badań Surowców, Wyrobów  
 Włókienniczych i Własności Elektrostatycznych  
 GŁÓWNY SPECJALISTA  
 Z-CIA KIEROWNIKA

The end of Test Report mgr inż. Jerzy Andrysiak



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AB 164

**Testing Laboratory accredited by the Polish Centre for Accreditation**

**TEST REPORT NO. BM 250.1 / 2021 / B / A**

- 1. Test ordered by:** <sup>X</sup> „TOPTEXTIL” Sp. z o.o., 29 Mickiewicza Street, 34-100 Wadowice
- 2. Name and description of tested material:** the sample: <sup>X</sup> **the upholstery woven fabric BALOO**, declared raw material composition: 93% Polyester, 6% Acrylic, 1% Cotton.
- 3. Date of receiving material for testing:** 2021-04-27
- 4. Date of test performance:** 2021-04-28 ÷ 05-11
- 5. Samples taken by:** <sup>X</sup> 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:** Małgorzata Frołow

- 1. Test results refer only to the tested material.*
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- 6. 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.*
- 7. Laboratory uses the requirements of ILAC-G8:09/2019. The conformity statement of test result with requirements specification takes place, when the test results together with expanded uncertainty does not exceed the tolerance limit given in specification. The conformity statement's rules given by Client could be allowed.*



**Test Report date:** 2021-05-14

**Number of Test Report 's copies:** 2

**Test Report handed to:**

- 1) „TOPTEXTIL” Sp. z o.o., Wadowice - 1 copy,
- 2) Laboratory of Testing Raw Materials, Textiles and Electrostatic Properties (location: 5/15 Brzezińska str.) - 1 copy.

**Test Report prepared by:**  
Patrycja Bąk

**Person authorizing the Test Report:**

Laboratorium Badań Surowców, Wyrobów  
Włókienniczych i Właściwości Elektrostatycznych  
GŁÓWNY SPECJALISTA  
Z-CY KIEROWNIKA

*mgr inż. Jerzy Andrysiak*



**TEST REPORT NO. BM 250.1 / 2021 / B / A**

Parameter	Value	Remarks
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
Abrasion resistance, number of rubs	1 specimen	sample conditioned according to PN-EN ISO 139:2006 + A1:2012, temp. 20° C ± 2 °C, RH: 65% ± 4%, the abradant: the standard woolen fabric, the nominal pressure used in the test: 12 kPa, magnification factor in the magnifying device: 8. <u>Criterion of destruction of the testing specimens in accordance with that standard:</u> flat woven fabric – three threads completely broken.
	2 specimen	
	3 specimen	
	4 specimen	
	<b>Total abrasion resistance (the lowest individual result)</b>	

Evaluation: according to PN-EN 14465:2005 + A1:2007: **A category: number of rubs ≥ 35 000 rubs,**  
**B category: number of rubs: 12 000 ÷ 30 000,** **C category: number of rubs: 4 000 ÷ 10 000**

**Person authorizing the Test Report**  
 Laboratorium Badań Surowców, Wyrobów  
 Włókienniczych i Własności Elektrostatycznych  
 GŁÓWNY SPECJALISTA  
 Z-CIA KIEROWNIKA

*mgr inż. Jerzy Andrysiak*

**The end of Test Report**



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[jerzy.andrysiak@iw.lukasiewicz.gov.pl](mailto:jerzy.andrysiak@iw.lukasiewicz.gov.pl)



AB 164

**Testing Laboratory accredited by the Polish Centre for Accreditation**

**TEST REPORT NO. BM 250.2 / 2021 / B / A**

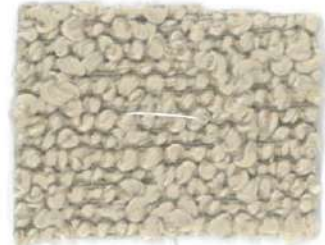
- Test ordered by:** X „TOPTEXTIL” Sp. z o.o., 29 Mickiewicza Street, 34-100 Wadowice
- Name and description of tested material:** the sample: X **the upholstery woven fabric BALOO**, declared raw material composition: 93% Polyester, 6% Acrylic, 1% Cotton.
- Date of receiving material for testing:** 2021-04-27
- Date of test performance:** 2021-05-12
- Samples taken by:** X correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
- Tests carried out according to:** methods presenting in testing table

**Results of Laboratory Tests**

see page 2/2

**Test performed by:** Małgorzata Frolow

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**Test Report date:** 2021-05-14

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**Test Report prepared by:**  
Patrycja Bąk

**Person authorizing the Test Report:**

Laboratorium Badań Surowców Włókienniczych i Własności Elektrostatycznych  
**GŁÓWNY SPECJALISTA  
 Z-CIA KIEROWNIKA**  
 mgr inż. Jerzy Andrysiak

Sieć Badań z Łukasiewicz-  
 Instytut Włókiennictwa  
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 I WŁAŚNOŚCI ELEKTROSTATYCZNYCH  
 92-103 Łódź, Brzezińska 5/15  
 tel. 42 61 63 142, fax 42 67 92 638

**TEST REPORT NO. BM 250.2 / 2021 / B / A**

Parameter		Value	Remarks
Propensity to surface fuzzing and pilling, grade	the number of rubs 500	5	PN-EN ISO 12945-2:2002 (modified Martindale method) sample conditioned according to PN-EN ISO 139:2006 + A1:2012, temp. 20° C ± 2 °C, RH: 65% ± 4%, number of test specimens: 3, number of evaluators: 3, the abradant: the standard woolen fabric; mass of weight: (415 ± 2) g.
	1 000	4 – 5	
	2 000	4 – 5 Slight surface fuzzing	
	5 000	4 - 5	
<p><u>Evaluation</u> according to PN-EN 14465:2005+A1:2007: <b>A category: grade ≥ 4 – 5;</b> B category: grade 4; C category: grade 3 – 4; D category: grade 3</p>			

**Person authorizing the Test Report**

Laboratorium Badań Surowców, Wyrobów  
Włókienniczych i Własności Elektrostatycznych  
GŁÓWNY SPECJALISTA  
Z-CIA KIEROWNIKA

*mgr inż. Jerzy Andrysiak*

The end of Test Report \_\_\_\_\_

**Laboratory of Chemical Testing  
and Instrumental Analysis**

The ŁUKASIEWICZ Research Network – Textile Research Institute  
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Łódź, 24<sup>th</sup> of May 2021

L-176/2021

**TEST CERTIFICATE No BCH 160/385/2021/A**

1. Name and address of the principal <sup>X)</sup>: „TOPTEXTIL” Sp. z o.o.  
34 – 100 Wadowice, ul. Mickiewicza 29
2. Subject of study <sup>X)</sup>: Sample of furniture upholstery fabric BALOO – raw material composition:  
93% polyester/6% acrylic/1% cotton
3. Date of receiving sample for testing: 26.04.2021
4. Date of the test conducting: 04.05 – 24.05.2021
5. Sampling : sample in a proper size, in a proper condition for research, supplied by the customer

**RESULTS OF THE TESTS**

Tested feature	Result of the test [degree] <sup>1)</sup>	Reference document	Test conditions	Level of requirements for categories according to PN-EN 14465:2005 + A1:2007		
				A	B	C
Colour fastness to: - artificial light	a/ 6	PN-EN ISO 105-B02:2014-11 Method No 2	Device: Xenotest Alpha LM Light conditions: A1 Radiation measurement in the range (300-400) nm Sample rotation was not used	≥ 6	≥ 5	≥ 4

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

Remarks:

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.
3. <sup>X)</sup> Data provided by the principal/customer.
4. Total number of pages of the test certificate: 1.

Authorized by:  
Marta Łatwińska, PhD



Confirmed by:

Laboratorium Badań Chemicznych  
i Analiz Instrumentalnych  
GŁÓWNY SPECJALISTA  
Z-CIA KIEROWNIKA/KIEROWNIK TECHNICZNY

mgr inż. Agnieszka Lisiak-Kucińska

Number of copies of the test certificate: 3

The test certificate receive:

- Customer - 2 copies
- The ŁUKASIEWICZ Research Network – Textile Research Institute – BCH - 1 copy

– THE END –

**Laboratory of Chemical Testing  
and Instrumental Analysis**

The ŁUKASIEWICZ Research Network – Textile Research Institute  
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phone No +48 42 61-63-130 (128), fax +48 42 61-63-131  
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[agnieszka.lisiak-kucinska@iw.lukasiewicz.gov.pl](mailto:agnieszka.lisiak-kucinska@iw.lukasiewicz.gov.pl)

Łódź, 24<sup>th</sup> of May 2021

L-176/2021

**TEST CERTIFICATE No BCH 160/385/2021/A/1**

- Name and address of the principal <sup>X)</sup>:** „TOPTEXTIL” Sp. z o.o.  
34 – 100 Wadowice, ul. Mickiewicza 29
- Subject of study <sup>X)</sup>:** Sample of furniture upholstery fabric BALOO – raw material composition:  
93% polyester/6% acrylic/1% cotton
- Date of receiving sample for testing:** 26.04.2021
- Date of the test conducting:** 04.05 – 24.05.2021
- Sampling :** sample in a proper size, in a proper condition for research, supplied by the customer

**RESULTS OF THE TESTS**

Tested feature	Result of the test [degree] <sup>1)</sup>	Reference document	Test conditions	Level of requirements for categories according to PN-EN 14465:2005 + A1:2007		
				A	B	C
Colour fastness to rubbing:		PN-EN ISO 105-X12:2016-08	Acclimatization time: 4h Temperature of the test: 19,3°C; Humidity of the test: 43.7%; rubbing pick: Ø 16±0,1mm; push: 9±0,2 N degree of moisturing of the rubbing cotton fabric: 100%			
- Dry						
<i>longitudinal direction</i>	a/ 5			≥ 4-5	4	3-4
<i>cross direction</i>	a/ 5					
- Wet						
<i>longitudinal direction</i>	a/ 4-5			≥ 3-4	3	2-3
<i>cross direction</i>	a/ 4-5					

<sup>1)</sup> Colour fastness according to "Grey scale" . indicator "5" means – no change in colour of the cotton rubbing fabric, indicator "1" means – big change in colour  
a/ staining - the cotton rubbing fabric

Remarks:

- 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.
- <sup>X)</sup> Data provided by the principal/customer.
- Total number of pages of the test certificate: 1.

Authorized by:  
Marta Łatwińska, PhD



Number of copies of the test certificate: 3

The test certificate receive:

- Customer - 2 copies
- The ŁUKASIEWICZ Research Network – Textile Research Institute – BCH - 1 copy

Confirmed by:

Laboratorium Badań Chemicznych  
i Analiz Instrumentalnych  
GŁÓWNY SPECJALISTA  
Z-CIA KIEROWNIKA/KIEROWNIK TECHNICZNY

*mgr inż. Agnieszka Lisiak-Kucińska*

- THE END -



TEST CERTIFICATE ON FLAMMABILITY TESTING OF UPHOLSTERY COMPOSITE

No 162 / BP / 21

**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. Mickiewicza 29  
34-100 Wadowice

**Subject of testing\*:**

Upholstery composite:

- upholstery fabric named BALOO, composition: 93% Polyester, 6% Acrylic, 1% Cotton
- polyurethane foam T-3037 SG, self-extinguish

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	<b>Neither progressive smouldering ignition nor flaming ignition occurred.</b>

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:



Krzysztof Kostanek Ph.D.

Test Certificate authorized by

Laboratorium Badań Palności Wyrobów  
GŁÓWNY SPECJALISTA  
KIEROWNIK

  
mgr inż. Małgorzata Szejna

Sample received on: 28.04.2021  
Test performed on: 28.05.2021  
Test Certificate issued on: 28.05.2021

**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.
4. The Orderer using this Test Certificate is responsible for the conformity between the product and sample submitted for testing. \*Data provided by the Customer.
5. \*Data provided by the Customer.

The Testing Laboratory accredited by the Polish Centre for Accreditation (PCA), No AB 029.

**DETAILED TESTING RESULTS**

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

Testing conditions: temperature 25 °C; humidity 36 %

**Preparation of test samples:**

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

**Upholstery composite characteristic:**

Upholstery composite:

- upholstery fabric named BALOO, composition: 93% Polyester, 6% Acrylic, 1% Cotton
- T-3037 polyurethane foam, self-extinguish.

Criteria		Cigarette			Remarks					
		1	2	3						
Smouldering criteria	Unsafe escalating combustion	NO	NO	-	Maximum cigarette smouldering time:  15 minutes 26 seconds					
	Test assembly consumed	NO	NO	-						
	Smoulders to extremities	NO	NO	-						
	Smoulders through thickness	NO	NO	-						
	Smoulders more than 1 hour	NO	NO	-						
	In final examination, presence of active smouldering	NO	NO	-	Maximum upholstery composite destruction:					
Flaming criteria	Occurrence of flames	NO	NO	-						
					length	width	depth	length	width	depth
					63	12	3	59	11	2

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



END OF THE TEST CERTIFICATE