

## Laboratory of Flammability Testing

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### TEST CERTIFICATE ON FLAMMABILITY TESTING OF UPHOLSTERY COMPOSITE

No 150 / 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 named LEA  
composition : 100% Polyester  
- T-3037 SG polyurethane foam, 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.



INSTYTUT WŁÓKIENICTWA  
LABORATORIUM  
BADAŃ PALNOŚCI WYROBÓW  
ul. Gdańska 118, 90-520 Łódź

#### 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:

*Andrzej Kubacki*  
Andrzej Kubacki, technician

Test Certificate authorized by:

Laboratorium Badań Palności WYROBÓW  
KIEROWNIK

*Malgorzata Szejna*  
mgr Inż. Malgorzata Szejna

05.07.2017

Sample received on: 07.06.2017

Test performed on: 03.07.2017

#### 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.

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

**TEST CERTIFICATE NO. BM 4.2.3.3 / 2017 / 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 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> chenille cover is completely wiped
	1 specimen	60 000	
	2 specimen	60 000	
	3 specimen	60 000	
	4 specimen	60 000	
<b>Total abrasion resistance</b> (the lowest individual result)		<b>60 000</b>	

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** \_\_\_\_\_

**Person authorizing the Test Certificate**

Name and surname: Zastępca Kierownika  
 Function: Laboratorium Błędnych Surowców  
 i Wyrobów Włókienniczych  
 Instytut Włókiennictwa  
 Signature:   
 mgr inż. Jerzy Andrysiak

**TEST CERTIFICATE NO. BM 4.2.3.2 / 2017 / 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) the conditioned sample, the abradant: the standard woolen fabric; mass of weight: 415 ± 2 g;
	500	5	
	1 000	4 - 5	
	2 000	4 - 5 Slight surface fuzzing	
<u>Evaluation</u> according to PN-EN 14465:2005+A1:2007: <b>A category: grade ≥ 4 - 5;</b> <b>B category: grade 4;</b> <b>C category: grade 3 - 4;</b> <b>D category: grade 3</b>			

\_\_\_\_\_ **The end of Test Certificate** \_\_\_\_\_

**Person authorizing the Test Certificate**

Name and surname:

Function:

Signature

Zastępca Kierownika  
Laboratorium Białych Surowców  
i Włóknieniczych  
Instytut Włókiennictwa  
mgr inż. Jerzy Andrysiak

**TEST CERTIFICATE NO. BM 4.2.3.1 / 2017 / 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	 4  4; 3,5; 4; 3,5; 3,5  4  4; 3,5; 4,5; 4; 4	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
<u>Evaluation:</u> according to PN-EN 14465:2005 + A1:2007 requirements level: <b>A category: ≤ 4 mm;</b> B category: ≤ 6 mm; C category: ≤ 8 mm		

\_\_\_\_\_ **The end of Test Certificate** \_\_\_\_\_

**Person authorizing the Test Certificate**

Name and surname:

Function:

Signature

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

**TEST CERTIFICATE NO. BM 4.2.3.4 / 2017 / G / A**

Parameter	Value	Remarks
Colour fastness to artificial light, grade - orange colour - green colour - grey colour - pink colour	5 4 - 5 5 6	PN-EN ISO 105-B02:2014-11 Method 2 device type: Xenotest Alpha HE, exposure conditions according to this European Standard paragraph 7 table 2: conditions of temperate zone - exposure cycle A1, <b>Assesment:</b> Visual assesment by comparison with blue wool light fastness references: from <b>1</b> (very low colour fastness) to <b>8</b> (very high colour fastness)
<b>Evaluation</b> according to PN-EN 14465:2005+A1:2007: A category: grade $\geq 6$ ;    B category: grade $\geq 5$ ; <b>C category: grade <math>\geq 4</math>;</b>		

\_\_\_\_\_ **The end of Test Certificate** \_\_\_\_\_

**Person authorizing the Test Certificate**

Name and surname: Zastępca Kierownika  
 Function: Laboratorium Badań Surowców  
 i Wyrobów Włókienniczych  
 Signature: Instytut Włókiennictwa  
 mgr inż. Jerzy Andrysiak

**Laboratory of Chemical Testing  
and Instrumental Analysis**

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e-mail: [jpiestrzeniewicz@iw.lodz.pl](mailto:jpiestrzeniewicz@iw.lodz.pl), [labchem@iw.lodz.pl](mailto:labchem@iw.lodz.pl)

Lódź 14<sup>th</sup> of July 2017

L – 263/2017

**ŚWIADECTWO Z BADAŃ nr BCH 252/562/2017/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 No 3 - furniture fabric LEA
- Date of receiving sample for testing:** 09.07.2017
- Date of performance of testing:** 12.07. – 13.07.2017
- 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 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 <sup>1)</sup> 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 a/ 4			≥ 3-4	3	2-3

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

Remarks:

- In accordance with ISO ILAC-IAF (January 2009) Communicate available on [www.pca.gov.pl](http://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.



Confirmed by:

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



mgr inż. Katarzyna Chylewska

Number of copies: 3

The test certificate receive:

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