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Textile Research Institute



UNIA DLA PRZEDSIĘWZĘTÓW

PROGRAM KONKURENCYJNOŚĆ

UNIA EUROPEJSKA



Laboratorium doposażone ze środków
Europejskiego Funduszu Rozwoju Regionalnego

Laboratorium Badań Surowców i Wyróbów 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 87.4.1.1 / 2016 / 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 fabric SENEGAL, declared raw material composition: 100 % Olefin*
3. Date of receiving material for testing: 04.05.2016
4. Date of test performance: 19.05.2016
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: 20.05.2016

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:

Elżbieta Piekarek-Kubicka

Person authorizing the Test Certificate:

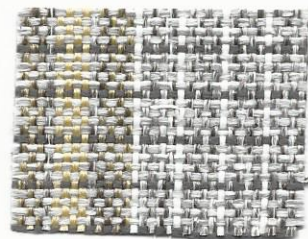
Name and surname: Halina Królikowska

Function: Head of the Laboratory

Signature:

mgr inż. Halina Królikowska

-verte-



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

TEST CERTIFICATE NO. BM 87.4.1.1. / 2016 / 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 12947-2:2000 + 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. Criterion of <u>destruction of the testing</u> <u>specimens in accordance with that standard:</u> at least three threads completely destroyed
	1 specimen	40 000	
	2 specimen	30 000	
	3 specimen	70 000	
	4 specimen	50 000	
	5 specimen	40 000	
	6 specimen	40 000	
	7 specimen	35 000	
	8 specimen	70 000	
Total abrasion resistance (the lowest individual result)		30 000	

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** _____

Person authorizing the Test Certificate

Laboratorium Badań Surowców
 i Wyrobów Włókienniczych
 Instytut Włókiennictwa

mgr inż. Halina Królikowska

TEST CERTIFICATE NO. BM 87.3.2 / 2016 / G / A


Parameter	Value	Remarks
Propensity to surface fuzzing and pilling, degree	the number of rubs	the abradant the standard woolen fabric
	500	5
	1 000	5
	2 000	4-5 slight surface fuzzing
	5 000	4-5 slight surface fuzzing
		PN-EN ISO 12945-2:2002 load - 415 g, the number of testing specimens - 3, the number of assessment persons - 3, <u>Assessment scale:</u> 5 - without change, 1- strong fuzzing and intensive pilling on the whole area of sample.

According to standard PN-EN 14465:2005+A1:2007 "Textiles. Upholstery fabrics. Specification and methods of test", the upholstery fabric **SENEGAL**, declared raw material: **100% Olefin** was classified as:

- **Level A** in reference to the fuzzing and pilling (Level A: \geq degree 4-5).

_____ The end of Test Certificate _____

Person authorizing the Test Certificate

Kierownik Techniczny
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
siedziba ul. Gdańska 118

dr inż. Beata Witkowska

TEST CERTIFICATE NO. BM 87.3.1 / 2016 / G / A

Parameter	Value / degree	Remarks
Colour fastness to artificial light, degree	6 (colour: black, grey, navy blue, red, beige, black)	PN-EN ISO 105-B02:2014-11 Method 2 testing apparatus - Xenotest Alpha HE exposure conditions: standard atmosphere in accordance with point 7 of this standard: the condition of the temperate zone, Exposure Cycle A1. Assessment: comparison with blue woolen standard: <i>degree 1</i> - very low color fastness to light, <i>degree 8</i> - very high color fastness to light.

According to standard PN-EN 14465:2005+A1:2007 "Textiles. Upholstery fabrics. Specification and methods of test", the upholstery fabric **SENEGAL**, declared raw material: **100% Olefin** was classified as:

- **Level A** in reference to the colour fastness to artificial light (Level A: \geq degree 6).

_____ The end of Test Certificate _____

Person authorizing the Test Certificate

Kierownik Techniczny
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
siedziba ul. Gdańska 118

dr inż. Beata Wilkowska



92-103 ŁÓDŹ, ul. Brzezińska 5/15,
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INSTITUT WŁOKNIENICTWA
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 Łódź, Brzezińska 5/15 Street
phone no. (0-42) 61-63-130 (120, 128), fax (0-42) 61-63-131
e-mail: jpierstrzeniewicz@iw.lodz.pl, labchem@iw.lodz.pl

Łódź 5th May 2016

L - 169/2016

TEST CERTIFICATE No BCH 162/293/2016/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 SENEGAL – material composition: 100% Olefin
- Date of receiving sample for testing:** 04.05.2016
- Date of performance of testing:** 04.05. – 05.05.2016
- 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 ¹⁾		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
- weft	a/ 4-5					
- warp	a/ 4-5					
- Wet				≥ 3-4	3	2-3
- weft	a/ 4-5					
- warp	a/ 4-5					

¹⁾ 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, 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

Number of copies: 3

The test certificate receive:

- Customer – 2 copies
- IW – Laboratory of Chemical Testing and Instrumental Analysis – 1 copy

Confirmed by:

LABORATORIUM BADAŃ CHEMICZNYCH
I ANALIZ INSTRUMENTALNYCH
KIEROWNIK

mgr inż. Jerzy Pięstrzeniewicz

LABORATORY OF FLAMMABILITY TESTING

90-520 Łódź, ul. Gdańska 118, tel.: +48(0) 42 2534435, +48(0)42 2534436, fax.+48(0)42 2534490

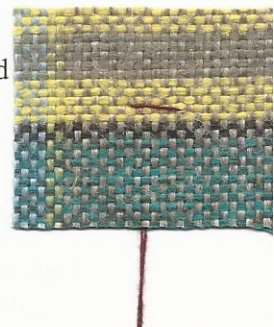
TEST CERTIFICATE ON FLAMMABILITY TESTING OF UPHOLSTERY COMPOSITE

No 132 / BP / 16

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
30-414 Kraków

Subject of testing:

Upholstery composite:

- upholstery fabric for furniture named SENEGAL
composition: 100% Olefin
- 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.INSTYTUT WŁOKIENNICTWA
ul. Gdańska 118, 90-520 Łódź
tel. 42 25 34 400, fax 42 25 34 490

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:

technician Andrzej Kubacki

Test Certificate authorized by:

Laboratorium Badań Palności Wyrobów
KIEROWNIK TECHNICZNYmgr inż. Agnieszka Hulewicz
16.05.2016

Sample received on: 04.05.2016

Test performed on: 16.05.2016

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.

DETAILED TESTING RESULTS

Climate conditions: temperature $(23 \pm 2) ^\circ\text{C}$; humidity $(50 \pm 5) \%$; time 24 h
 Testing conditions: temperature $20 ^\circ\text{C}$; humidity 35 %

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 SENEGAL,
composition: 100% Olefin
- CM-3040 polyurethane flame-retardant foam

Criteria		Cigarette			Remarks
		1	2	3	
Smouldering criteria	Unsafe escalating combustion	NO	NO	-	Maximum cigarette smouldering time: 18 minutes 05 seconds
	Test assembly consumed	NO	NO	-	
	Smoulders to extremities	NO	NO	-	
	Smoulders through thickness	NO	NO	-	Maximum upholstery composite destruction:
	Smoulders more than 1 hour	NO	NO	-	
	In final examination, presence of active smouldering	NO	NO	-	
Flaming criteria	Occurrence of flames	NO	NO	-	horizontal [mm]
					vertical [mm]
					length width depth length width depth
					94 18 15 92 25 12

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

END OF THE TEST CERTIFICATE