The Łukasiewicz Research Network
Textile Research Institute
Laboratory of Flammability Testing
The Łukasiewicz Research Network - Textile Research Institute,
92-103 Lodz, 5/15 Brzezinska Str.
Laboratory: 90-520 Lodz, 118 Gdanska Str., phone 48 42 2534435 (436), fax 48 42 2534490
e-mail: mszejna@iw.lodz.pl

PCA Polskie Centrum Akredytacji BADANIA
AB 029

TEST CERTIFICATE ON FLAMMABILITY TESTING OF UPHOLSTERY COMPOSITE

No539 / BP / 19

Test method:

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

Orderer*:

Sieć Badawcza Łukasiewicz-
INSTYTUT WŁÓKIENNICTWA
LABORATORIUM
BADAŃ PALNOŚCI WYROBÓW
ul. Gdańska 118, 90-520 Łódź

Subject of testing*:

Upholstery composite:
- upholstery fabric named UTTARIO VELVET, 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.

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:
Kostanek
Krzysztof Kostanek Ph.D.

Test Certificate authorized by

Laboratorium Badań Palności Wyrobów
KIEROWNIK
mgr inż. Małgorzata Szejna

Sample received on: 04.11.2019
Test performed on: 11.12.2019
Test Certificate issued on: 11.12.2019

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.
5. *Data provided by the Customer.

DETAILED TESTING RESULTS

Climate conditions: temperature (23 ± 2) °C; humidity (50 ± 5) %; time 24 h
Testing conditions: temperature 22°C; humidity 31 %

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:

- T-3037 SG polyurethane foam, self-extinguish

Criteria		Cigarette			Remarks						
		1	2	3							
Smouldering criteria	Unsafe escalating combustion	NO	NO	-	Maximum cigarette smouldering time: 14 minutes 32 seconds						
	Test assembly consumed	NO	NO	-							
	Smoulders to extremities	NO	NO	-							
	Smoulders through thickness	NO	NO	-							
	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	NO	NO	-	horizontal [mm]			vertical [mm]			
					length	width	depth	length	width	depth	
					70	15	11	70	17	6	

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

END OF THE TEST CERTIFICATE

The Łukasiewicz Research Network
Textile Research Institute

AB 077

Laboratory of Chemical Testing and Instrumental Analysis
The Łukasiewicz Research Network – Textile Research Institute
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phone no. +48 42 6163130 (128), fax +48 42 6163131
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Łódź, 16th December 2019

L-527/2019

TEST CERTIFICATE No. BCH 474/1210/2019/A

1. Name and address of the principal X)

2. Subject of study X)**:** sample 1 – furniture upholstery product UTTARIO VELVET, declared material composition: 100 % polyester

3. Date of receiving sample for testing: 31st October 2019

4. Date of the tests conducting: 11th December - 12th December 2019

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]	Reference document	Technical specifications	Level of requirements for categories according to PN-EN 14465:2005 + A1:2007 A	B	C
Colour fastness to:			Acclimatization conditions: - temperature: 20 ± 2 °C - relative humidity: 65 ± 4 % - time of acclimatisation: 4 h Test conditions: - ambient temperature and humidity - rubbing pick: Ø 16 ± 0,1 mm - push: 9 ± 0,2 N - degree of moisturising of the rubbing fabric: 95-100 %			
- *dry rubbing:* 1)		PN-EN ISO 105-X12:2016-08				
longitudinal direction	a/ 4-5			≥ 4-5	≥ 4	≥ 3-4
cross direction	a/ 4-5					
- *wet rubbing:* 1)						
longitudinal direction	a/ 4-5			≥ 3-4	≥ 3	≥ 2-3
cross direction	a/ 4-5					

1) colour fastness according to "Grey scale", indicator "5" means – no change in colour and in staining adjacent fabric, indicator "1" means – big change in colour
a/ staining - the cotton rubbing fabric

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. X) Data provided by the principal/customer.
Y) The decision-making principle in the event that the principal requires a statement of compliance – in accordance with the Principle of Acceptance described in Procedure No. 7.1:
- **acceptance** (compliant) – the results are within the tolerance limit. The risk of incorrect acceptance is up to 50% in the case of results close to the tolerance limit;
- **rejection** (incompatible) – the results obtained are outside the tolerance limit. The risk of incorrect rejection is 50% in the case of results close to the tolerance limit.
Z) The decision-making principle specified by the principal/customer.
4. Total number of pages of the test certificate: 2.

Tests authorized by:

LABORATORIUM BADAŃ CHEMICZNYCH
I ANALIZ INSTRUMENTALNYCH
Z-ca Kierownika Technicznego
mgr inż. Zdzisława Mrozińska

Confirmed by:

LABORATORIUM BADAŃ CHEMICZNYCH
I ANALIZ INSTRUMENTALNYCH
ZASTĘPCA KIEROWNIKA
mgr inż. Agnieszka Lisiak-Kucińska

Number of copies: 3
The test certificate receive:
- Customer - 1 copy
- The ŁUKASIEWICZ Research Network – Textile Research Institute – BM - 1 copy
- The ŁUKASIEWICZ Research Network – Textile Research Institute – BCH - 1 copy

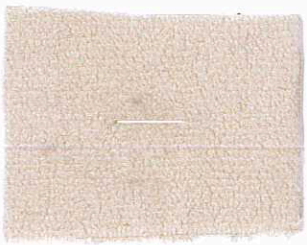
- THE END -

The Łukasiewicz Research Network
Textile Research Institute

Laboratory of Testing
Textile Raw Materials and Fabrics
The Łukasiewicz Research Network – Textile Research Institute,
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, jandrysiak@iw.lodz.pl

TEST CERTIFICATE NO. BM 723.1 / 2019 / B

2. **Name and description of tested material**: the sample: **the upholstery product UTTARIO VELVET,** declared raw material composition: 100% Polyester
3. **Date of receiving material for testing:** 2019-10-28
4. **Date of test performance:** 2019-11-19
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. *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: 2019-12-12
Number of Certificate copies: 2
Test Certificate handed to:

2) Laboratory of Testing Textile Raw Materials and Fabrics - 1 copy.

Certificate prepared by:
Patrycja Bąk

Sieć Badawcza Łukasiewicz-
INSTYTUT WŁÓKIENNICTWA
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
92-103 Łódź, ul. Brzezińska 5/15

Person authorizing the Test Certificate:
Name and surname:
Function:
Signature:

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych

mgr inż. Jerzy Andrysiak

-verte-

TEST CERTIFICATE NO. BM 723.1 / 2019 / B

Parameter	Value	Remarks
Seam slippage resistance, mm: Longitudinal direction **The mean value of resistance to perforation in the seam for longitudinal direction, mm** - individual results, mm Cross direction **The mean value of resistance to perforation in the seam for cross direction, mm** - individual results, mm	**3 ± 0** 3; 3; 2,5; 2,5; 3 **3 ± 0** 3; 3; 3,5; 3; 4	PN-EN ISO 13936-2:2005 the conditioned sample 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

The end of Test Certificate

Person authorizing the Test Certificate

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych

mgr inż. Jerzy Andrysiak

The Łukasiewicz Research Network
Textile Research Institute
Laboratory of Testing
Textile Raw Materials and Fabrics
The Łukasiewicz Research Network – Textile Research Institute,
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e-mail: bwitkowska@iw.lodz.pl , jandrysiak@iw.lodz.pl

AB 164

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

TEST CERTIFICATE NO. BM 723.2 / 2019 / B / A

2. **Name and description of tested material**: the sample**: the upholstery product UTTARIO VELVET,** declared raw material composition: 100% Polyester
3. **Date of receiving material for testing:** 2019-10-28
4. **Date of test performance:** 2019-11-15
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

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: 2019-12-12
Number of Certificate copies: 2
Test Certificate handed to:
1)
2) Laboratory of Testing Textile Raw Materials and Fabrics - 1 copy

Sieć Badawcza Łukasiewicz-
INSTYTUT WŁÓKIENNICTWA
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
92-103 Łódź, ul. Brzezińska 5/15

Certificate prepared by:
Patrycja Bąk

Person authorizing the Test Certificate:
Name and surname:
Function:
Signature:

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

-verte-

TEST CERTIFICATE NO. BM 723.2 / 2019 / 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) the conditioned sample, 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	
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

mgr inż. Jerzy Andrysiak

The Łukasiewicz Research Network
Textile Research Institute
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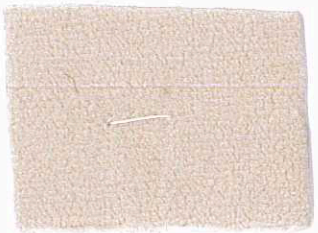
AB 164

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

TEST CERTIFICATE NO. BM 723.3 / 2019 / B / A

2. **Name and description of tested material**: the sample: **the upholstery product UTTARIO VELVET,** declared raw material composition: 100% Polyester
3. **Date of receiving material for testing:** 2019-10-28
4. **Date of test performance:** 2019-11-05÷08
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

Test performed by: Elżbieta Olczak

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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: 2019-12-12
Number of Certificate copies: 2
Test Certificate handed to:
1)
2) Laboratory of Testing Textile Raw Materials and Fabrics - 1 copy

Sieć Badawcza Łukasiewicz-
INSTYTUT WŁÓKIENNICTWA
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
92-103 Łódź, ul. Brzezińska 5/15

Certificate prepared by:
Patrycja Bąk

Person authorizing the Test Certificate:
Name and surname:
Function: Zastępca Kierownika Laboratorium Badań Surowców i Wyrobów Włókienniczych
Signature:

mgr inż. Jerzy Andrysiak

-verte-

TEST CERTIFICATE NO. BM 723.3 / 2019 / 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 woolen fabric, the nominal pressure used in the test: 12 kPa, magnification factor in the magnifying device: 8. Criterion of destruction of the testing specimens in accordance with that standard: cut pile fabric – pile spots of 5 mm^2 are fully worn off, without any damage to rows / columns threads in knitted fabric.
	1 specimen	45 000	
	2 specimen	45 000	
	3 specimen	50 000	
	4 specimen	50 000	
	Total abrasion resistance (the lowest individual result)	**45 000**	
Evaluation: according to PN-EN 14465:2005 + A1:2007: **A category: number of rubs ≥ 45 000 rubs,** B category: number of rubs: 25 000 ÷ 40 000, C category: number of rubs: 10 000 ÷ 20 000			

The end of Test Certificate

Person authorizing the Test Certificate:

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych

mgr inż. Jerzy Andrysiak

The Łukasiewicz Research Network
Textile Research Institute

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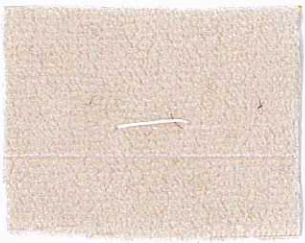
e-mail: bwitkowska@iw.lodz.pl, jandrysiak@iw.lodz.pl

TEST CERTIFICATE NO. BM 723.4 / 2019 / B

2. **Name and description of tested material**: the sample: : **the upholstery product UTTARIO VELVET,** declared raw material composition: 100% Polyester
3. **Date of receiving material for testing:** 2019-10-28
4. **Date of test performance:** 2019-12-09
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: Elzbieta Olczak

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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: 2019-12-12
Number of Certificate copies: 2
Test Certificate handed to:

2) Laboratory of Testing Textile Raw Materials and Fabrics - 1 copy.

Sieć Badawcza Łukasiewicz-
INSTYTUT WŁÓKIENNICTWA
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
92-103 Łódź, ul. Brzezińska 5/15

Certificate prepared by:
Patrycja Bąk

Person authorizing the Test Certificate:
Name and surname:
Function:
Signature:

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych

mgr inż. Jerzy Andrysiak

TEST CERTIFICATE NO. BM 723.4 / 2019 / B

Parameter	Result	Test method
Resistance to drawing out the threads for longitudinal direction, degree	3	PN-79/P-04664 conditioned sample, device for testing resistance to drawing out the threads: Shirley ICI Mace snag tester, England, number of the template used for sewing: 2, number of the roller revolutions: 300, number of tested specimens: 2 for each direction
Resistance to drawing out the threads for cross direction, degree	3 – 4	Assessment according to photographic standard: **degree 5:** very good resistance to drawing out the threads (without puffs), **degree 4:** good resistance to drawing out the threads, **degree 3:** sufficient resistance to drawing out the threads, **degree 2:** insufficient resistance to drawing out the threads, **degree 1:** very poor resistance to drawing out the threads.

The end of Test Certificate

Person authorizing the Test Certificate

Zastępca Kierownika
Laboratorium Badań Surowców
i Wyrobów Włókienniczych

mgr inż. Jerzy Andrysiak