

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

TEST CERTIFICATE ON FLAMMABILITY TESTING OF MATTRESSES

No 1 / BP / 20

Test method:

PN-EN 597-1:2016-02 Furniture. Assessment of the ignitability of mattresses and upholstered bad bases. Part 1: Ignition source: Smouldering cigarette.

Orderer*:

TOPTEXTIL Sp. z o.o.
ul. Mickiewicza 29
34-100 Wadowice

Subject of testing*:

Mattress layout
- material knitwear BARI, composition: 100% Polyester
- 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.

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

Results of testing:

Standard	Test method	Result
PN-EN 597-1:2016-02	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 mattress, mattress pillow or upholstered bed base in use.

Tests performed by:

Krzysztof Kostanek

Krzysztof Kostanek Ph.D.

Test Certificate authorized by

mgr inż. Agnieszka Hulewicz
LABORATORIUM BADAŃ PALNOŚCI WYROBÓW
CIEROWNIK TECHNICZNY

mgr inż. Agnieszka Hulewicz

Sample received on: 02.12.2019
Test performed on: 07.01.2020
Test Certificate issued on: 08.01.2020

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 22 °C; humidity 35 %

Sample dimensions: (450 x 350 x 5) mm

1. Test method according to PN-EN 597-1:2016-02

Criteria		Cigarette			Place of the smouldering cigarette
		1	2	3	
Smouldering criteria	Unsafe escalating combustion	NO	NO	NO	Cigarette 1 - laid on a flat surface of the mattress in the longitudinal direction. The cigarette was smoking entire length.
	Test assembly consumed	NO	NO	NO	
	Smoulders through thickness	NO	NO	NO	
	Smoulders more than 1 hour	NO	NO	NO	Cigarette 2 - laid on a flat surface of the mattress surface in a transverse direction. Cigarette 2 did not smoke along its entire length. Has gone off after 9 minutes and 18 seconds.
	In final examination, presence of progressive smouldering	NO	NO	NO	
Flaming criteria	Occurrence of flames	NO	NO	NO	Cigarette 3 - laid on a flat surface of the mattress surface in a transverse direction. The cigarette was smoking entire length. Maximum smoldering time of a cigarette 1 and 3 : 14 min 53 sec

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

END OF THE TEST CERTIFICATE



AB 164

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

TEST CERTIFICATE NO. BM 785.1.1 / 2019 / G / A

1. **Test ordered by: TOPTEXTIL Sp. z o.o.**
34-100 Wadowice, 39 Mickiewicza Str.
2. **Name and description of tested material:** the sample: **The mattress knitted fabric BARI, declared raw materials: 100% polyester**
3. **Date of receiving material for testing:** 2019-12-03
4. **Date of test performance:** 2019-12-06
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: Krystyna Wierus M.Sc. Eng

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: 2019-12-11

Number of Certificate copies: 3

Test Certificate handed to:

- 1) TOPTEXTIL Sp. z o.o. - 2 copies.,
- 2) Laboratory for Testing Textile Raw Materials and Fabrics (location: 118 Gdańska str.) - 1 copy.

Certificate prepared by:

Zofia Mokwińska M.Sc. Eng

Person authorizing the Test Certificate:

Surname and name: Beata Witkowska, Ph. D.

Function: Head of Laboratory

Signature:

Beata Witkowska
dr inż. Beata Witkowska

Sieć Badawcza Łukasiewicz-
INSTYTUT WŁÓKIENICTWA
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
92-103 Łódź, ul. Brzezińska 5/15
siedziba: 90-520 Łódź, ul. Gdańska 118

TEST CERTIFICATE NO. BM 785.1.1 / 2019 / G / A

Parameter		Value		Remarks
Propensity to surface fuzzing and pilling, degree	the number of rubs	the standard woolen fabric	the testing knitted fabric	PN-EN ISO 12945-2:2002 abradant: the standard woolen fabric, the testing knitted fabric load - 155 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.
	125	4	5	
	500	3-4	5	
	1 000	3	5	
	2 000	2-3	5	
	5 000	2-3	5	
7 000	2 district surface fuzzing and district pilling	5 without change		

_____ The end of Test Certificate _____

Person authorizing the Test Certificate

Laboratorium Badań Surowców
i Wyrobów Włókienniczych
KIEROWNIK
Julia
dr inż. Beata Witkowska



AB 164

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

TEST CERTIFICATE NO. BM 785.1.2 / 2019 / G / A

1. **Test ordered by: TOPTEXTIL Sp. z o.o.**
34-100 Wadowice, 39 Mickiewicza Str.
2. **Name and description of tested material:** the sample: **The mattress knitted fabric BARI,**
declared raw materials: 100% polyester
3. **Date of receiving material for testing:** 2019-12-03
4. **Date of test performance:** 2019-12-06 ÷ 07
5. **Samples taken by:** correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
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Results of Laboratory Tests

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Certificate prepared by:

Zofia Mokwińska M.Sc. Eng

Person authorizing the Test Certificate:

Surname and name: Beata Witkowska, Ph. D.

Function: Head of Laboratory

Signature:

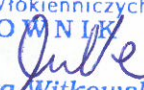
dr inż. Beata Witkowska

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TEST CERTIFICATE NO. BM 785.1.2 / 2019 / G / A

Parameter	Value	Remarks
Dimensional change after 5 times washing and drying, % -lengthwise direction, % -widthwise direction, %	- 9,5 ± 0,0 - 6,0 ± 0,5	PN-EN ISO 5077:2011 PN-EN ISO 3759:2011 number of washings / washing procedure number / drying procedure according to PN-EN ISO 6330:2012 5 x / 6N at temperature 60°C / procedure A –line dry, number of samples – 3, mass of the samples – 103 g, type of ballast: - III, reference detergent 3, the washer type A, (-) shrinkage, (+) extension.

The end of Test Certificate

Person authorizing the Test Certificate
 Zakład Techniki Włókienniczej i Włókiennictwa
 KIEROWNIK

 dr inż. Beata Witkowska