

CONFIDENCIALU

KOPIJA TKRA

*Handwritten signature*

TESTING LABORATORY

# TEST REPORT

CUSTOMER

SAMPLE:

(according to the customer order)

Fibre composition: 100 % polyester  
Mass per unit area:  $300 \pm 30 \text{ g.m}^{-2}$   
Colour: grey, navy

CONDITIONS OF  
APPLICATION OF THE TEST  
REPORT:

The laboratory is not responsible for information supplied by the customer that may affect the validity of test results.

Test Report contains results of the tests related to the submitted sample only. Sampling has been done by the customer. The Report may not be reproduced in any way other than as a complete set. Reproduction of certain parts of the Report is subject to approval of the test laboratory, which has issued it. All information about subcontracted tests results or unaccredited test methods is presented in text part of the test report. Unless otherwise stated, all tests were performed at the address, listed in the header.

PREPARED BY:  
CHECKED BY:  
NUMBER OF PAGES:

DATE OF  
ACCEPTANCE:  
04.06.2024

DATE OF  
EXAMINATION:  
05.06.-11.07.2024

DATE OF  
ISSUE:  
16.07.2024

***Determination of textile fibres composition in mixtures by gravimetry***

was performed according to the Regulation No. 1007/2011 of the European Parliament and of the Council. Before the analysis all fibres in the sample were examined and identified microscopically and/or using ATR-FTIR spectrometry.

- test method: No. 14 with sulphuric acid (conc.) - content of polyester fibres

**Result:** Content of analysed fibres as a percentage corrected using agreed allowances (annex IX)

Uncertainty of measurement 0.5 %

[REDACTED]	
Results (%)	
polyester	

***Determination of mass indicators - mass per unit area using small samples***

was performed according to ČSN EN 12127:1998

- conditions of testing: ČSN ISO 139:2005; temperature (20±2) °C; RH (65±4) %
- treatment/relaxation procedure before testing: any procedure applied
- specimens tested: 5
- specimen dimensions: 10 x 10 cm

[REDACTED]	
Results	
Mean mass per unit area (g.m <sup>-2</sup> )	

***Dimensional change after wet treatment***

was evaluated according to ČSN EN ISO 5077:2008. The samples for evaluation were prepared according to ČSN EN ISO 3759:2012 Washing was carried out according to ČSN EN ISO 6330:2022

- conditioning: ČSN ISO 139:2005; relative humidity (65±4) %, temperature (20±2) °C
- washing machine: type A (FOM-71MP, Electrolux-Wascator)
- specimens tested
- procedure:
- detergent: star
- ballast used: type
- total duration
- number of washing
- drying procedure: procedure
- measuring positions number: three pairs of marks
- specimen type: flat textile

The combined measurement uncertainty is approximately

[REDACTED]	
Results	warp / weft direction
Dimensional change (%)	



***Determination of the permeability of fabrics to air***

was performed according to ČSN EN ISO 9237: 1995

- testing and conditioning atmosphere: temperature (20±2) °C; RH (65±4) %
- direction of the air flow: from inner to face side
- test surface area used: / cm<sup>2</sup>
- specimens tested:
- pressure drop used: 0 Pa

Results	
Mean air permeability R (mm.s <sup>-1</sup> )	

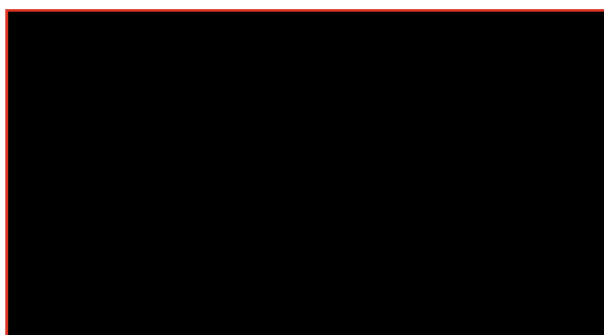
***Testing the resistance to pilling and matting of textile fabrics. Modified Martindale method and assessment of pilling, fuzzing and matting by visual analysis***

was performed according to ČSN EN ISO 12945-2:2021 – modified Martindale method

- conditioning: temperature (20±2) °C; RH (65±4) %
- specimens' treatment before testing: tested in original state
- loading mass and nominal pressure used: (415±2) g
- number of specimens tested / evaluators: 3 / 3
- abradant: wool

Results: Evaluation of surface change in grades according to ČSN EN ISO 12945-4:2021

Results	
P	
r	
1	
2	
5	
7	






**Measurement of thermal resistance under steady state-conditions**

was performed according to ČSN EN ISO 11092:2015


- arrangement of test specimens: side facing the human body towards the measuring unit
- specimens tested: 3
- individual measurement on each specimen: 1x
- atmosphere for testing: air temperature (20±0,1) °C, RH (65±3,0) %
- hotplate temperature: 35 °C
- measuring unit area: 0,044 m<sup>2</sup>

	
Results	
Mean value of the thermal resistance $R_{et}$ (m <sup>2</sup> .K.W <sup>-1</sup> )	

**Determination of resistance of textile fabrics to surface wetting – spray test**

was performed according to the ČSN EN ISO 4920:2013

- conditioning: temperature (20±2) °C; RH (65±4) %
- temperature of water: 20 °C

	
Results	
Individual values (degree)	
. sample 1	
. sample 2	
. sample 3	

**Weave**

was determined according to ČSN 80 0018:1993 Weaves and weaves technique. Terminology

- standard atmosphere used: ČSN EN ISO 139:2005; temperature (20±2) °C; RH (65±4) %

Results: verbal description of weave

*Test outside the scope of accreditation.*

	
Results	







***Determination of colour fastness to rubbing***

was tested according to ČSN EN ISO 105-X12:2016

- rubbing conditions: dry / wet (wetting of rubbing cloth: 100 %)
- rubbing finger: for textiles [diameter (16±0,1) mm; downward force (9±0,2) N]
- climatic conditions during testing: temperature (20 ± 2) °C, RH (65 ± 5) %
- time of air-conditioning of samples: 24 hours

Result: grade of grey scale (staining to cotton rubbing cloth according to ČSN EN ISO 105-A03:2020)

[Redacted]	
Results	
staining in warp / weft direction	
dry conditions	
wet conditions	

***Determination of colour fastness to artificial light: Xenon arc fading lamp test***

was tested according to ČSN EN ISO 105-B02:2015

- instrument: QSUN-Xe2, model B02, air cooled Xe lamp
- lighting procedure: method 2
- sample's rotation: not used
- exposure conditions: A1 - normal, adequate to mild zone (RH 40 %, BST (45±3) °C)
- approximate radiation energy: (300-400 nm): 20,1 MJ/m<sup>2</sup>

Result: grade of blue scale

[Redacted]	
Results	
colour change	

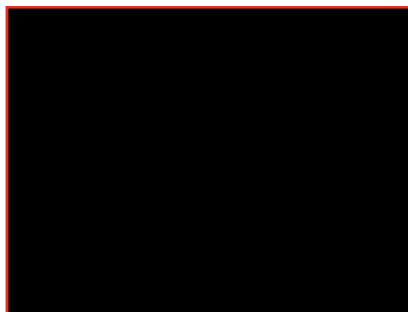
***Determination of colour fastness to washing***

was tested according to ČSN EN ISO 105-C06:2010

- pre-treatment: 5 washing cycles according to ČSN EN ISO 6330:2022
- test conditions: A1S, 40 °C
- steel balls number: 10
- washing detergent: ECE
- souring treatment: not used
- adjacent fabrics: polyamide / wool

Result: Numerical rating of the tested specimen colour change (ČSN EN 20105-A02:1995). Staining of the tested specimen to the individual adjacent fabrics (ČSN EN ISO 105-A03:2020)

[Redacted]	
Results	
colour change / staining	





*Determination of colour fastness to perspiration*

was tested according to ČSN EN ISO 105-E04:2013

- adjacent fabrics: polyamide / wool
- the option used: samples tested horizontally

Result: Numerical rating of the tested specimen colour change (ČSN EN 20105-A02:1995). Staining of the tested specimen to the individual adjacent fabrics (ČSN EN ISO 105-A03:2020)

Results	
colour change / staining	
alkaline solution	
acid solution	

Approved by:

E

End of report

