



Textilní zkušební ústav, s.p.

ONFIDENCIALU

KOPIJA TKRA

*[Handwritten signature]*

# TEST REPORT

**CUSTOMER:**

**SAMPLE:** **Double fleece fabric, art. 6500 (interlock weave)**  
 (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:**

M. Hrubanová *[Signature]*  
I. Tichá *[Signature]*  
6

**DATE OF ACCEPTANCE:**



4267  
azi@y.cz



Textilní zkušební ústav, s.p.

**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 %

Art. 6500 – colour grey	
Results (%)	
polyester	

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

was performed according to ČSN EN 12127-1

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

Art. 6500 – colour grey	
Results	
Mean mass per unit area (g.m <sup>-2</sup> )	

**Dimensional change after wet treatment**

was evaluated according to ČSN EN ISO 3759:2012 for evaluation were prepared according to ČSN EN ISO 3759:2012 washing was carried out according to ČSN EN ISO 3759:2012

- conditioning: ČSN ISO 139:2005 (20±2) °C
- washing machine: type A (FOM-...)
- specimens tested: ...
- procedure: 4N ( ± ...)
- detergent: standard ECE
- ballast used: type III SN
- total ballast load: 2
- number of washing cycles: ...
- drying procedure: procedure F
- measuring positions number: three pairs of marks
- specimen type: flat textile

The combined measurement uncertainty is approximately 10%

Art. 6500 – colour grey	
Results	warp / weft direction
Dimensional change (%)	



AZ  
pa



Textilní zkušební ústav, s.p.

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

was performed according to ČSN EN ISO 15187-2:2011

- testing and conditioning: temperature (20±2) °C, RH (65±4) %
- direction of the air flow: perpendicular to the fabric surface
- test surface area used: 100 cm<sup>2</sup>
- specimens tested: 10
- pressure drop used: 120 Pa

Art. 6500 – colour grey	
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

Art. 6500 – colour grey												
Results												
Pilling rubs	Pilling				Fuzzing				Matting			
	sp.1	sp.2	sp.3	average	sp.1	sp.2	sp.3	average	sp.1	sp.2	sp.3	average





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

was performed according to

- arrangement of test specimens: side facing the human body towards the measurement
- specimens tested
- individual measurement on each specimen: 1x
- atmosphere for testing: air temperature
- hotplate temperature: 25
- measuring unit area: 0,1

<b>Art. 6500 – colour grey</b>	
Results	
<b>Mean value of the thermal resistance <math>R_{ct}</math> (<math>m^2 \cdot K \cdot W^{-1}</math>)</b>	

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

was performed according to the ČSN 73 0013

- conditioning: temperature  $(20 \pm 2) ^\circ C$ , RH  $(65 \pm 4) \%$
- temperature of water

<b>Art. 6500 – colour grey</b>	
Results	
<b>Individual values (degree)</b>	
. sample 1	
. sample 2	
. sample 3	

**Weave**

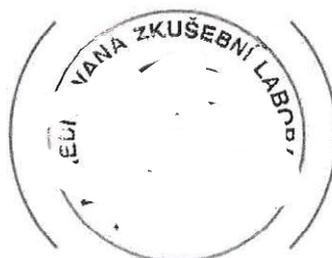
was determined according to ČSN 90 0018:1002 Weaves and weaves techniques. Terminology

- standard atmosphere used

Results: verbal description

Test out

<b>Art. 6500 – colour grey</b>	
Results	





Textilní zkušební ústav, s.p.

**Determination of colour fastness to rubbing**

was tested according to

- rubbing conditions: dry / wet (wetting of fabric)
- rubbing finger: for textiles [diameter (16±0.1) mm]
- climatic conditions during testing: temp. (20±2) °C, RH 65%
- time of air-conditioning of samples: 4 hours

**Result:** grade of grey scale (staining) according to ISO 105-A02

Art. 6500 – colour navy	
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 ISO 105-B02:2015

- instrument: Xe lamp
- lighting procedure: method 2
- sample's rotation: not used
- exposure conditions: A1 (40 °C)
- approximate radiation energy: 100000 J/m²

**Result:** grade of blue scale

Art. 6500 – colour navy	
Results	
colour change	

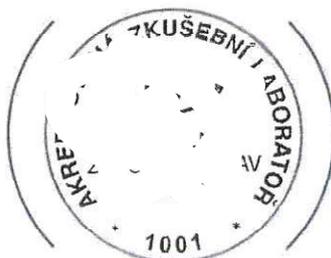
**Determination of colour fastness to washing**

was tested according to ISO 105-C06:2010

- pre-treatment: 5 v
- test conditions: A1 40 °C
- steel balls number: 10
- washing detergent: 1
- souring treatment: not used
- adjacent fabrics: polyamide 1

**Result:** Numerical rating of the tested specimen colour change to the tested specimen to the individual adjacent fabrics (ISO 105-A03:2020)

Art. 6500 – colour navy	
Results	
colour change / staining	



A7 J741-01

P.



Textilní zkušební ústav, s.p.

***Determination of colour fastness to perspiration***

was tested according to

- adjacent fabric
- the option used: samples

Result: Numerical rating of the test

the tested specimen to the individual adjacent

staining

Art. 6500 – colour navy	
Results	
colour change / staining	
alkaline solution	
acid solution	

Approved by:

End of report

31  
1  
5/1