

# Unitec-200

65% POLYESTER / 35% COTTON

200 GSM / TWILL 3/1



Fabric name	Unitec-200
Fabric weight	200 ± 5 gsm
Composition	65% Polyester, 35% Cotton
Full width	150 ± 2 cm
Weave	twill 3/1
Finishes	—
Area of use	men's and women's workwear and uniform
Washing instruction	

## Physical properties\*

			warp	weft
1	Tensile strength, N	ISO 13934-1:2013	1200	550
2	Tearing strength, N	ISO 13937-3:2000	30	30
3	Dimensional Stability To Washing, max.	ISO 6330:2000	3.0%	3.0%
4	Abrasion Resistance	ISO 12947-2:2002	> 20 000	
5	Pilling Resistance (after 1000 rev.)	ISO 12945-2:2000	4	
6	Colour Fastness To Washing (cotton+polyester) 60°C, min.	ISO 105-C06:2010		
	Colour change	ISO 105-C06:2010	4-5	
	Colour staining	ISO 105-C06:2010	3-4	
7	Colour Fastness To Perspiration, min.	ISO 105-E04:2013		
	Colour change		4-5	
	Colour staining		4-5	
8	Colour Fastness To Rubbing, min.	ISO 105-X12:2001		
	Dry		3-4	
	Wet		2-3	
9	Colour Fastness To Light	ISO 105-B02:2013	> 4	

\* The values shown are indicative and may vary slightly from batch to batch.

[www.xmtextiles.com](http://www.xmtextiles.com)

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<b>2022EP6256</b>
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## TEST REPORT

### DATE OF RECEPTION

*Date Format: dd/MM/yyyy* 25/02/2022

### DATE OF TESTS

Starting : 02/03/2022

Ending: 17/03/2022

### APPLICANT

XM Textiles Europe UAB

Dariaus ir Gireno st. 42A Office 509

LT-02189 Vilnius

Att CERTIFICATION TEAM

### REFERENCE OF SAMPLES

Reference by AITEX	Reference provided by the customer	Sample description
2022EP6256-S01	Fabric ref. UNITEC-200	Fabric

### TESTS CARRIED OUT

- PRE-TREATMENT FOR INDUSTRIAL WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING
- DETERMINATION OF CANCEROGENIC ARYLAMINES
- DETERMINATION THE pH VALUE OF AQUEOUS EXTRACT
- DETERMINATION OF BREAKING STRENGTH AND ELONGATION
- DETERMINATION OF TEAR RESISTANCE
- DETERMINATION OF DIMENSIONAL CHANGE IN WASHING AND DRYING
- FORMALDEHYDE

Tests marked with \* are not included within the scope of the accreditation.

**DESCRIPTION OF SAMPLES**

**Reference by AITEX:** 2022EP6256-S01

**Reference provided by the customer:**

Fabric ref. UNITEC-200

**Sample description:**

Fabric ref. UNITEC-200

Composition and percentage 65% Polyester, 35% Cotton, , Twill 3/1

Weight 200gsm

Color White

Others (if any) XMT-21-144-ZHJ

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Reference by AITEX	Reference provided by the customer
2022EP6256-S01.1	Fabric ref. UNITEC-200 AFTER WASH

The client has provided AITEX all the technical information about the articles to certify. All this information is enclosed in the Application Form



## RESULTS

### PRE-TREATMENT FOR INDUSTRIAL WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING

**Standard**

EN ISO 15797:2018

**Washing procedure**

Table 4, procedure 1

**Washing cycles**

1

**Washing temperature**

85°C

**Driying procedure**

A (tumble dryer) - Industrial dryer 13010I12

**Driying temperature**

70°C

**Reference**

2022EP6256-S01

**Test date**

**Start date**

03/03/2022

**End date**

04/03/2022

Dry mass of the samples (Kg)	Counterweight mass (Kg)	Counterweight type	Equipment
0.35	12.1	COTTON / POLYESTER	LAVADORA INDUSTRIAL 4 13535I05



## RESULTS

### DETERMINATION OF CANCEROGENIC ARYLAMINES

#### Standard

EN 14362-1:2017

#### Detection System according to

Gas Chromatograph 7890A

#### Testing Method

GC/MSD

#### Uncertainty

± 9 mg/Kg

Reference	Result (mg/Kg)
2022EP6256-S01	< 30

#### <sup>1</sup> Arylamines tested

Substance		
4-Aminobiphenyl	3,3'-Dimethylbenzidine	2,4-Diaminoanisole
Benzidine	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	o-Anisidine
4-Chlor-o-toluidine	p-Cresidine	3,3'-Dichlorobenzidine
2-Naphthylamine	4,4'-Methylene-bis-2-chloraniline	2,4,5-Trimethylaniline
o-Aminoazotoluene	4,4'-Oxydianiline	4,4'-Diaminodiphenylmethane
2-Amino-4-nitrotoluene	4,4'-Thiodianiline	2,4-Toluyldiamine
p-Chloraniline	o-Toluidine	
3,3'-Dimethoxybenzidine	4-Aminoazobenzene	



## RESULTS

### DETERMINATION THE pH VALUE OF AQUEOUS EXTRACT

**Standard**

EN ISO 3071:2020

**Determination date**

03/03/2022

**Extractor solution**

KCl

**pH Extractor solution**

5.6

**Temperature**

(21 )°C

Reference	pH	Uncertainty
2022EP6256-S01	4.20	±5%



## RESULTS

### DETERMINATION OF BREAKING STRENGTH AND ELONGATION

**Standard**

EN ISO 13934-1:2013

**Equipment**

INSTRON Dynamometer

**Conditioned date**
**Start date** 7/3/2022 **End date** 10/3/2022

**Test date**
**Start date** 07/03/2022 **End date** 10/03/2022

**Gauge length**
**Warp:**200 mm

**Weft:**200 mm

**Pretension**
**Warp:**5.0 N

**Weft:**5.0 N

**Gauge speed**
**Warp:**100 mm/min

**Weft :**100 mm/min

**Atmosphere for conditioning**
**Temperature** (20 ± 2) °C **Relative Humidity** (65 ± 4) %

**Number of test specimens per material to be tested**
**Tested** 5 **Rejected** 0

**State of the specimens**

Conditioned

**Reference**

2022EP6256-S01.1

Direction	Maximum force (N)	Medium strength	C.V.	Elongation to the maximum load(%)	Average elongation	C.V.
Warp	1600	1600	1.5	18.5	18	3.2
	1700			18.5		
	1600			18		
	1600			18		
	1700			17		
Weft	700	710	2.9	16	16.5	1.3
	730			16.5		
	700			16.5		
	710			16.5		
	740			16.5		

**Uncertainty**

± 5% assay value of the measured



## RESULTS

### DETERMINATION OF TEAR RESISTANCE

**Standard**

EN ISO 13937-2:2000

**Equipment**

INSTRON Dynamometer

**Test date**
**Start date** 07/03/2022 **End date** 10/03/2022

**Conditioned date**
**Start date** 7/3/2022 **End date** 10/3/2022

**Atmosphere for conditioning**
**Temperature**  $(20 \pm 2) ^\circ\text{C}$  **Relative Humidity**  $(65 \pm 4) \%$ 
**Number of test specimens per material to be tested**
**Tested** 5 **Rejected** 0

**Reference**

2022EP6256-S01.1

Tear	Specimen	Average load	Classification value (N)	C.V.	
Lengthwise	32.5	33	25.9	2.8	
	32.5				
	32.3				
	33.5				
	34.4				
Crosswise	27.4	27		25.9	2.2
	26.4				
	26.9				
	26.5				
	25.9				

**Uncertainty**
 $\pm 3.9\%$  assay value of the measured



## RESULTS

### DETERMINATION OF DIMENSIONAL CHANGE IN WASHING AND DRYING

**Standard**

EN ISO 5077:2008

**Preparation, marking and measuring of fabric specimens according to EN ISO 3759:2011**
**Start date** 10/3/2022 **End date** 17/03/2022

**Equipment**

Washing machine (13535105)

**Washing cycles**

5

**Washing temperature**

85°C

**Driying procedure**

A (tumble dryer) - Industrial dryer 13010I12

**Driying temperature**

70°C

**Uncertainty**
 $\pm 0.4 \%$ 
**Reference**

2022EP6256-S01.1

Specimen	Direction	Dimensional change (%)	Direction	Average result - Dimensional change (%)
1	WARP	-3	WARP	-3
	WEFT	-1		
-	-	---	WEFT	-1
	-	---		

**Note**

Positive dimensional change indicates lengthening. Negative dimensional change indicates shrinkage



## RESULTS

### FORMALDEHYDE

**Standard**

EN ISO 14184-1:2011

**Test date****Start date**

04/03/2022

**End date**

04/03/2022

**Application range of the calibration straight line**

15-600 mg/Kg

Reference	Formaldehyde (mg/Kg)	Uncertainty
2022EP6256-S01	5	± 11%



**Lucia Martinez**  
Head of PPE and Ballistics department

Date: 21/03/2022 17:12:27

Digitally Signed by: LUCIA MARTINEZ MOLTO -

NIF:21651425F

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**STANDARD  
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**BEWO 084394  
TESTEX**

**This certificate BEWO 084394 is valid until  
15.08.2025.**

### **SUPPORTING DOCUMENTS**

- ✓ Test report : BJ015 245163.1
- ✓ Declaration of conformity in accordance with EN ISO 17050-1 as required by OEKO-TEX®
- ✓ OEKO-TEX® Terms of Use (ToU)

A handwritten signature in blue ink, appearing to read "M. Bachmann", positioned above a horizontal line.

**Matz Bachmann  
Managing Director**

A handwritten signature in blue ink, appearing to read "D. Ajdinovic", positioned above a horizontal line.

**Dijana Ajdinovic  
Ecology Team Leader**