

List of tests (2020)

1. Fibre content analysis

No.	Measured characteristic	Test method
1	2	3
1.1	Qualitative analysis of polymers	STP-7 (DSC analysis)
1.2	Qualitative analysis of textile fibers	ISO/TR 11827, p. 7.1.1., 7.2.1, 7.4* ISO/TR 11827, p. 7.5.2.7 ISO/TR 11827, p.7.6.2.
1.3	Qualitative and quantitative analysis of binary component mixture	LST EN ISO 1833 series standards (accredited: LST EN ISO 1833-1, 4, 7, 11, 12)* Directive 1007/2011
1.4	Qualitative and quantitative analysis of ternary component mixture	LST EN ISO 1833-2* Directive 1007/2011*
1.5	Qualitative and quantitative analysis of four component mixture	STP-3
1.6	Qualitative and quantitative analysis of five and more component mixture	STP-4
1.7	Quantitative microscopical analysis of mixtures which cannot be separated mechanically or chemically	STP-22
1.8	Quantitative analysis of animal fibres by microscopy	LST EN ISO 17751-1 LST EN ISO 17751-2

2. Colour fastness tests

No.	Measured characteristic	Test method
1	2	3
2.1	Colour fastness to artificial light	LST EN ISO 105-B02* Exposition until 5 grade Exposition over 5 grade
2.2	Colour fastness to water	LST EN ISO 105-E01*
2.3	Colour fastness to sea water	LST EN ISO 105-E02
2.4	Colour fastness to chlorinated water	LST EN ISO 105-E03
2.5	Colour fastness to perspiration	LST EN ISO 105-E04*
2.6	Colour fastness to spotting: water	LST EN ISO 105-E07
2.7	Colour fastness to rubbing	LST EN ISO 105-X12*
2.8	Colour fastness to dry cleaning	LST EN ISO 105-D01*
2.9	Colour fastness to rubbing with organic solvents	LST EN ISO 105-D02
2.10	Colour fastness to washing	LST EN ISO 105-C10 LST EN ISO 105-C06* LST EN ISO 105-C08
2.11	Colour fastness to industrial laundering	LST EN ISO 105-C12
2.12	Colour fastness to ironing	LST EN ISO 105-X11
2.13	Colour fastness to bleaching by hypochlorite	LST EN 20105-N01
2.14	Colour fastness to organic solvents	LST EN ISO 105-X05

NOTE: according to the agreement with customer the colour fastness may be assessed visually (according to LST EN 20105-A02: 1997 and LST EN 20105-A03: 2020) or instrumentally (according to LST EN ISO 105-A04: 2000 and LST EN ISO 105-A05: 2000).

3. Chemical tests

No.	Measured characteristic	Test method
1	2	3
3.1	pH value	LST EN ISO 3071
3.2	Free and extractable formaldehyde (water extract method)	LST EN ISO 14184-1
3.3	Removal of non-fibrous matter (oils, grease, paraffin)	STP-5

4. Physical tests (textile materials)

No.	Measured characteristic	Test method	
1	2	3	
4.1	Mass per unit area	for fabrics	LST EN 12127*
		only for woven fabrics	LST ISO 3801
		nonwoven fabrics	LST EN 29073-1
		rubber- or plastics- coated fabrics	LST EN ISO 2286-2
4.2	Mass per unit length	LST ISO 3801, 1÷4 methods	
4.3	Length and width of woven fabrics	LST ISO 22198	
4.4	Determination of width and length	LST EN 1773	
4.5	Tensile strength and elongation	for various fabrics	LST EN ISO 13934-1* (strip method)
		for various fabrics	LST EN ISO 13934-2 (grab method)
		for coated fabrics	LST EN ISO 1421*
		for nonwoven fabrics	LST EN 29073-3
4.6	Seam tensile properties	LST EN ISO 13935-1 (strip method)	
		LST EN ISO 13935-2* (grab method)	
4.7	Tear strength	woven fabrics, non-woven fabrics	LST EN ISO 13937-1 (Elmendorf method) LST EN ISO 13937-2* (trousers-shaped) LST EN ISO 13937-3 (wing-shaped) LST EN ISO 13937-4 (tongue-shaped) LST EN 1875-3 (trepezium- shaped)
		nonwoven fabrics, coated fabrics	LST EN ISO 9073-4
		for coated fabrics	LST EN ISO 4674-1*
4.8	Bursting strength	LST EN ISO 13938-1	
4.9	Propensity to surface fuzzing and to pilling	LST EN ISO 12945-2* (Martindale method)	
4.10	Resistance to pilling and to surface fuzzing	LST EN ISO 12945-1 (Pilling box method)	
4.11	Abrasion resistance	for various fabrics	LST EN ISO 12947-2*
		for various fabrics	LST EN ISO 12947-3
		for various fabrics	LST EN ISO 12947-4
		for coated fabrics	LST EN ISO 5470-2
		for upholstery fabrics	LST EN 14465, annex A
		for knitted footwear garments	LST EN 13770
4.12	Determination of the elasticity of fabrics	LST EN 14704-1: (strip tests)	
4.13	Slippage resistance of yarns at a seam in woven fabrics	fixed seam opening	LST EN ISO 13936-1
		fixed load	LST EN ISO 13936-2
4.14	Determination of the recovery from creasing	LST EN 22313	
4.15	Determination of fabrics resistance to damage by flexing	for coated fabrics	LST EN ISO 7854
4.16	Determination of coating adhesion		LST EN ISO 2411

5. Physical tests (fibers, yarns)

No.	Measured characteristic		Test method
1	2		3
5.1	Tensile strength and elongation of yarns		LST EN ISO 2062
5.2	Twist in yarns		LST EN ISO 2061
5.3	Thread density	from woven fabric	LST EN 1049-2
		From knitted fabric	LST EN 14971
5.4	Linear density of yarns	the skein method	LST EN ISO 2060
		from woven fabric	ISO 7211-5
		from knitted fabrics	LST EN 14970
5.6	Fiber diameter (microscopic test)	for wool fiber	LST EN ISO 137
		for chemical fibres	AATCC Test Method 20A, p. 14 (microscopical analysis)
5.6	Fiber length	for all fibers	ISO 6989

7. Physiological comfort tests

No.	Measured characteristic		Test method
1	2		3
7.1	Hygroscopy		STP-8
7.2	Determination of the time of absorption	for towels	LST EN 14697, annex B
7.3	Resistance to surface wetting		LST EN ISO 4920
7.4	Resistance to water penetration	for fabrics	LST EN ISO 811*
		for coated fabrics	ISO 1420
7.6	Air permeability		LST EN ISO 9237
7.7	Thermal resistance		LST EN ISO 11092*
7.8	Water vapour permeability (cup method)		STP-1
7.9	Moisture management		AATCC 195

8. Dimensional stability

No.	Measured characteristic		Test method
1	2		3
8.1	Dimensional change in washing and drying (after 1 washing cycle)		LST EN ISO 5077* (washing and drying procedure according to LST EN ISO 6330*)
8.2	General appearance after 1 washing cycle		STP-2 (Washing and drying procedure according to LST EN ISO 6330*) Assessment according to an agreement.
8.3	Twist or skewness after 1 washing cycle	knitted fabrics	ISO 16322-1
		fabrics	ISO 16322-2
		garments	ISO 16322-3
8.4	Washing and drying procedures (carrying out separately or ordered additionally)	1 cycle	LST EN ISO 6330*
		2÷3 cycles	
		4÷5 cycles	
		10÷15 cycles	
		20÷25 cycles	
		30 cycles	
		50 cycles	

9. Burning behaviour, heat resistance

No.	Measured characteristic		Test method
1	2		3
9.1	Ease of ignition (without pretreatment)		LST EN ISO 6940
9.2	Ignitability (small flame) (without pretreatment)	curtains and drapes	LST EN 1101
9.3	Limited flame spread	protective clothing	LST EN ISO 15025*
		multilayer assembly	
		hardware	
9.4	Burning behaviour of fabrics for apparel (without pretreatment)		LST EN 1103
9.5	Flame spread behaviour (without pretreatment)		LST EN ISO 6941
9.6	Heat resistance (without pretreatment)	for fabrics	ISO 17493
		for hardware	

10. Electrostatic properties

No.	Measured characteristic		Test method
1	2		3
10.1	Surface resistivity (without pretreatment)	protective clothing	LST EN 1149-1*
10.2	Vertical resistance (without pretreatment)		LST EN 1149-2
10.3	Shielding factor and haft decay time (without pretreatment)		LST EN 1149-3, method 2

11. Colour measurement

No.	Measured characteristic	Test method
1	2	3
11.1	Measurement of surface colour: CIE chromaticity coordinates, CIE tristimulus values	LST EN ISO 105-J01*
11.2	Determination of colour differences (ΔE_{CMC} , ΔE^*_{ab})	LST EN ISO 105-J03*
11.3	Characteristics of fluorescent material for high-visibility warning clothing: - CIE chromaticity coordinates, Luminance factor - Exposure (according to LST EN ISO 20471, p. 5.2)	LST EN ISO 20471, p.7.2*
		LST EN ISO 105-B02*
11.4	Spectral reflectance in NIR spectral range	STP-21
11.5	Instrumental assessment of relative whiteness	LST EN ISO 105-J02

12. Other tests

No.	Measured characteristic	Test method
1	2	3
12.1	Oil repellency for flat fabrics	LST EN ISO 14419

NOTES:

- 1) * – tests, included in the scope of accreditation.
- 2) „STP“- laboratory developed method.
- 3) Fee for report in Lithuanian language – **10 EUR**; in English – **15 EUR**;