

Services Directory

updated: May 2023

A) Mechanical and Technological Research

1. Imprints of surfaces

2. Burning behavior

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|------|--|---|
| 2.1 | Burning behavior of building materials
5 samples (edge or surface ignition) | DIN 4102-1 building material class B2 |
| 2.2 | Ignition by a burner
5 samples (edge or surface ignition) | DIN 53438-2 or -3 |
| 2.3 | Automobile interior (5 samples) | DIN 75200 (MVSS 302) |
| 2.4 | Automobile interior
5 samples length, crosswise each | Guideline 95/28EG Appendix 4
ECE 118-Annex 6 |
| 2.5 | Ignitability of upholstered furniture
Ignition source: smouldering cigarette | DIN EN 1021 T1 |
| 2.6 | Burning behavior of curtains and drapes | DIN EN 1102 |
| 2.7 | Measurement of flame spread properties
vertically oriented specimen
(edge or surface ignition) | DIN EN ISO 6941 |
| 2.8 | Burning behavior of protective gloves | DIN EN 407 |
| 2.9 | Protection against heat and flame
(protective clothing) | DIN EN ISO 15025 |
| 2.10 | Determination of inflamability
vertically oriented specimen
(edge or surface ignition) | DIN EN ISO 6940 |

3. Thickness

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| 3.1 | Thickness of textile fabrics | DIN EN ISO 5084; DIN EN ISO 9073-2 |
| 3.2 | incl. compressability | DIN 53885 |

4. Differential Scanning Calorimetry

set temperature, melting point

5.	Twisting	
5.1	Untwist procedure	DIN EN ISO 2061
5.2	Slippage method	
6.	Electrostatic behavior	
6.1	Determination of electrical resistance	DIN 54345 T1
6.2	Measurement of surface resistivity	DIN EN 1149-1
6.3	Measurement of electrical vertical resistance	DIN EN 1149-2
7.	Thread count wovens	DIN EN 1049-2
8.	Diameter of fibers	
	Ocular micrometer - synthetic fibers	
9.	Fiber fineness	
	Vibroscope method	DIN EN ISO 1973
10.	Fiber length	
	Single fiber measurement	DIN 53808-1
11.	Mass per unit area	DIN EN 12127; DIN EN 29073-1
12.	Yarn count	
12.1	Skein method	DIN EN ISO 2060
12.2.	Short length method	DIN 53830 T3
12.3	Rate of yarn length	DIN 53862
12.4	Number of filaments	
13.	Odor test	VDA 270
14.	Weave of fabric	
15.	Weight portion warp and weft	DIN 53856
16.	Hairiness of yarns	comparison test
17.	Infrared spectrum	
18.	Hook and loop fastener test	VDA 230-210
19.	Crease resistance	
	Cylinder method	ENKA; method 3061 A
20.	Crimp parameters	
20.1	Number of crimps of single fibers	ASTM D3937-12 Option 1
20.2	Crimp parameters of textured filament yarns	DIN 53840-1, DIN 53840-2
21.	Permeability of air	DIN EN ISO 9237
22.	Mesh density	DIN EN 14971

23. Dimensional change	DIN EN ISO 5077
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23.2 machine wash	DIN EN ISO 6330
23.3 tumble drying	DIN EN ISO 6330
23.4 Heating (hot air)	internal method
24. Upholstery fabrics for living area	DIN EN 14465
24.1 Tensile strength	DIN EN ISO 13934-1
24.2 Tear strength	DIN EN ISO 13937-3
24.3 Slippage resistance	DIN EN ISO 13936-2
24.4 Abrasion resistance	DIN EN ISO 12947-2
24.5 Pilling behavior	DIN EN ISO 12945-2
24.6 Light fastness	DIN EN ISO 105-B02 (method 2)
24.7 Rubbing fastness	DIN EN ISO 105-X12
25. Slippage behavior	DIN EN ISO 13936-2 + 13936-1
26. Pilling, Martindale method	DIN EN ISO 12945-2, DIN EN ISO 12945-4
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27.1 Martindale method	
27.1.1 Specimen breakdown	DIN EN ISO 12947-2
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27.1.3 Appearance change	DIN EN ISO 12947-4
27.1.4 Abrasion resistance of protective clothing	DIN EN 530
27.1.5 Abrasion resistance of protective gloves	DIN EN 388
27.1.6 Abrasion resistance of coated textiles	DIN EN ISO 5470-2
27.2 Frank Hauser method	according to DIN 53528
27.3 Schopper method	according to DIN 53863 T2
28. Shrinkage of yarns	
28.1 Water	according to replaced DIN 53866-T2
28.2 Hot air	according to replaced DIN 53866-T3
28.3 Hot air monofilament	according to DIN EN 13844
29. Protective clothing	DIN EN 388
29.1 Abrasion resistance	
29.2 Cut resistance	only section 6.2
29.3 Force breaking through	section 6.5
29.4 Tear strength	
30. Lustre from use dry and humid condition	internal method
31. Spray test	AATCC 22, DIN EN ISO 4920
32. Staff-Test (fiber abrasion Zweigle G555)	
33. Stress-strain characteristic in compression	DIN EN ISO 3386-1

34.	Static punchure test CBR test	DIN EN ISO 12236
35.	Delamination strength	
35.1	Delamination of fusible interlinings	DIN 54310
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12. Absorptivity	
12.1 Velocity of soaking water	DIN 53924
12.2 Water absorption	DIN 53923
12.3 TEGEWA drop test	
12.4 Drying time	internal method
13. Detection of special damages, qualitative	
14. Determination of melting point	
15. Spray test	AATCC 22, DIN EN ISO 4920
16. Laundering Domestic washing and drying procedures	DIN EN ISO 6330
17. Water and stain protection	
17.1 Spray test	AATCC 22, DIN EN ISO 4920
17.2 Water drop test according to Dupont	
17.3 Oil repellency	AATCC 118, DIN EN ISO 14419

C) Color fastness

1. Fastness to spotting: alkali	DIN EN ISO 105-E06
2. Fastness to hot pressing (dry, humid, wet)	DIN EN ISO105-X11
3. Fastness to bleaching: sodium chlorite mild	DIN EN ISO 105-N03
4. Fastness to bleaching: sodium chlorite	DIN EN ISO 105-N04
5. Fastness to chlorinated water	DIN EN ISO 105-E03
6. Fastness to hot water	DIN EN ISO 105-E08
7. Fastness to bleaching: hypochlorite mild	DIN 54034
8. Fastness to bleaching: hypochlorite severe	DIN EN 20105-N01
9. Fastness to washing in presence of hypochlorite	DIN 54016
10. Fastness to light	Xenotest ALPHA LM High Energy
10.1 to artificial light	DIN EN ISO 105-B02
10.2 to artificial light at high temperature	DIN EN ISO 105-B06
10.3 to light of textiles wetted with artificial perspiration	DIN EN ISO 105-B07
11. Fastness to organic solvents	DIN EN ISO 105-X05

12.	Fastness to sea water	DIN EN ISO 105-E02
13.	Fastness to rubbing	
13.1	Fastness to rubbing, dry and wet	DIN EN ISO 105-X12
13.2	Fastness to rubbing, Perchloroethylene, Acetone	DIN EN ISO 105-D02
14.	Fastness to spotting: acid	DIN EN ISO 105-E05
15.	Fastness to artificial saliva	BVL B 82.92-3, DIN 53160-1
16.	Fastness to perspiration	DIN EN ISO 105-E04, BVL B 82.02-13, DIN 53160-2
17.	Fastness to sublimation in storage	DIN 54056
18.	Fastness to dry heat	DIN EN ISO 105-P01
19.	Fastness to dry cleaning	DIN EN ISO 105-D01
20.	Fastness to washing	
20.1	Fastness to washing, domestic and commercial laundering	DIN EN ISO 105-C06, -C08, -C09
20.2	Fastness to washing with soap	DIN EN ISO 105-C10
21.	Fastness to water	DIN EN ISO 105-E01
22.	Fastness to water spotting	DIN EN ISO 105-E07

Drawing up expert reports for claims and complaints