Testing Laboratory

Accreditation Scope of Applied Chemistry Research Centre (ACRC), Pakistan Council of Scientific & Industrial Research Laboratories Complex, Lahore, Pakistan

Permanent laboratory premises [X]

Materials/ Products tested	Types of test/ Properties measured	Range of measurement	Minimum detection limit	Uncertainty of Measurement (where applicable) MU (±)	Standard specification/ Techniques/ equipment used
Textile Lab					
Textiles	Colour Fastness to Light: Xenon Arc Fading Lamp Test	1-5 Grey Scale Rating	1	0.5	ISO 105 B02: 1999 Instrumental Technique
	Colour Fastness to Domestic & Commercial Laundering	1-5 Grey Scale Rating	1	0.5	ISO 105 C06 / C2S: 1994 Instrumental Technique
	Colour Fastness to Dry Cleaning	1-5 Grey Scale Rating	1	0.5	ISO 105 D01: 1993 Instrumental Technique
	Colour Fastness to Water	1-5 Grey Scale Rating	1	0.5	ISO 105 E01: 1994 Instrumental Technique
	Colour Fastness to Sea-water	1-5 Grey Scale Rating	1	0.5	ISO 105 E02: 1994 Instrumental Technique
	Colour Fastness to Perspiration	1-5 Grey Scale Rating	1	0.5	ISO 105 E04: 1994 Instrumental Technique
	Colour Fastness to Rubbing	1-5 Grey Scale Rating	1	0.5	ISO 105 X12: 2002 Instrumental Technique

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Materials/ Products tested	Types of test/ Properties measured	Range of measurement	Minimum detection limit	Uncertainty of Measurement (where applicable) MU (±)	Standard specification/ Techniques/ equipment used
Textiles	Determination of the Pilling Resistance & other related Surface Changes of Textile Fabrics (Martindale Tester)	1 – 5 Grade	1	0.5	ISO 12945-2:2000 Instrumental Technique
	Determination of Abrasion Resistance of Fabrics (Martindale Tester)	1 - 99,999 Rubs	1	4.036	ISO 12947:1998
	Water Repellency: Spray Test	0-100 Spray Rating	0	Not applicable	AATCC 22:2005 Instrumental Technique
	Wrinkle Recovery of Fabrics: Appearance Method	WR-1 – WR-5 Wrinkle Recovery Rating	1	0.5	AATCC 128:2004 Instrumental Technique
	Gray Scale for assessing change in color	1-5 Gray Scale Rating	1	0.5	ISO 105 A 02:1994
	Gray Scale for assessing staining	1-5 Gray Scale Rating	1	0.5	ISO 105 A 03:1994
	Dimensional Changes of Garments after Home Laundering	>0.1%	0.1%	0.5	AATCC 150 : 2003 Instrumental Technique
	Dimensional Changes of Fabrics after Home Laundering	>0.1%	0.1%	0.5	AATCC 135:2003 Instrumental Technique
	Linear Density of Yarn (Yarn Number) by the Skein Method.	1-2500 Wraps	1 Wrap	0.00057	ASTM D 1907-01 Instrumental Technique
	Warp End Count and Filling Pick Count of Woven Fabric	Not applicable	Not applicable	Not applicable	ASTM D 3775-03a
	Textile: Atmosphere for Conditioning and Testing	18-22 °c 60-70% RH	18 °c 60% RH	2 5	ISO 139: 2005

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Leather Lab					
Leather	Cr-VI Content	1mg/kg-50 mg/kg	1 mg/kg	0.02mg/kg	SLC 22, (IUC 18) Spectrophotometric Technique
	Pentachlorophenol	>0.1-10.0 ppm	>0.1	0.04mg/kg	CLRI & Freiburg Method Gas Chromatography
	Formaldehyde Content in Leather	9mg/kg-74 (mg/kg)	9.0 mg/kg	0.06mg/kg	IUC 19 (SLC 23) Spectrophotometric
	Tensile strength and percentage elongation	0.5N -2.5 KN	0.5N	Tensile= ±0.48N/mm^2 Elongation= ±0.1%	IUP 6 (SLP 6) Tensile Strength
	Circular Rubbing	1-5 Gray Scale Rating	1	0.5	SLF 5 (BS 1006: UK-LC) Rubbing
	Tearing Load (Double Edge)	0.5N -2.5 KN	0.5N	0.1N	IUP 8 (SLP 7)/ BS EN ISO 3377-2:2002 Tear
	Tearing Load (Single Edge)	0.5N -2.5 KN	0.5N	0.1N	EN 388:2003 6.3. Tear
	pH Value of an Aqueous Extract	3.0 -12.0	3.0	0.11	SLC 13 (IUC 11; BS 1309:9)/ BS EN ISO 4045:1998 Electrometric
	Determination of Water Vapour Permeability	1.0 Sec-99Hrs	1.0 Sec	0.5mg/cm^2.h	BS EN 420: 2003 6.3. Transmission
	Measurement of Abrasion Resistance	1.0 - 99,999 Rubs (I-4 Level)	1.0 (1 Level)	Not applicable	BS EN 388:2003 6.1 Abrasion Resistance

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