

Laboratory	Man Made Textiles Research Association (Mantra), Ring Road, Surat, Gujarat		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	31.10.2016
Certificate Number	T-2306	Valid Until	30.10.2018
Last Amended on	07.11.2016	Page	1 of 2

S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	TEXTILE MATERIALS			
1.	Yarns (Staple and Filament)	Tensile Properties Of Yarn By The Single-Strand Method	ASTM D 2256/ D2256 M -10 (RA 2015)	0.5 N to 50 N 20 % to 35 %
		Linear Density Of Yarn (Yarn Number) By The Skein Method	ASTM D 1907/D1907M-12	15 Denier to 200 Denier
		Twist In Yarn By Direct Counting	ASTM D 1423- 02: (2008)	40 tpm to 3600 tpm
2.	Yarns and Fabric	Standard Test Method For Number Of Filaments In Yarn	MANTRA/M/LAB TM-01: (2009) (In-House Test Method)	10 to 108
		Standard Test Method For Yarn Number Based On Short-Length Specimens	MANTRA/M/LAB TM-02(2012) (In-House Test Method)	15 Denier to 450 Denier
3.	Fabric	Breaking Force And Elongation of Textile Fabrics (Strip Method)	ASTM D 5035- 11 (RA 2015) IS 1969-1: 2009 ISO 13934-1: 2013	100 N to 5 kN 10 % to 50 %
		Warp End Count And Filling Pick Count Of Woven Fabric.	ASTM D 3775 - 12	4/inch to 240 /inch
		Twist Of Yarn Removed From Fabric	ASTM D 1423- 02: (2008)	40 tpm to 3600 tpm
		Length Of Woven Fabric.	ASTM D3773/D3773M -10 (RA 2014) (Option A-Hand)	5 mm to 3000 mm

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	Fabric	Width Of Woven Fabric.	ASTM D 3774 -96: (2012)	0.1 cm to 300 cm
		Mass Per Unit Area (Weight) Of Fabric	ASTM D 3776 /D3776M -09 (RA 2013) (Option C) IS 1964: 2001 (RA 2006) Method (A) & Method (B) ISO 3801: 1977 (Method 5)	15 g/m ² to 800 g/m ²
		Tearing Strength Of Fabrics By The Tongue (Single Rip) Procedure (Constant-Rate-Of-Extension Tensile Testing Machine)	ASTM D 2261-13 IS 6489 (Part 2): 2011 ISO 13937-2: 2000	50 N to 5 kN
		Tearing Strength Of Fabrics By Falling-Pendulum (Elmendorf-Type) Apparatus	ASTM D1424- 09: (2013)e1 ISO 13937-1: 2000	320 gf to 5120 gf
		Fabric Propensity To Surface Fuzzing And To Pilling Part 2: Modified Martindale Method	ISO 12945-2: 2000 ASTM D4970 / D4970M - 16	100 Cycles to 1,00,000 Cycles Qualitative (Rating 1 to Rating 5)
		Abrasion Resistance Of Textile Fabrics (Martindale Abrasion Tester Method)	ASTM D4966 - 12 ^{e1} (Option: 1 & 2)	100 Cycles to 1,00,000 Cycles Qualitative (Rating 1 to Rating 5)

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