

Laboratory Indian Jute Industries' Research Association (Testing Laboratory),  
17, Taratala Road, Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7365 (in lieu of T-3992 & T-3993)

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Validity 16.06.2018 to 15.06.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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**CHEMICAL TESTING**

I.	TEXTILE			
1.	Textiles and Related Products [Food Grade Jute Products (FGJP)]	Unsaponifiable Matter Content	IJO 98/01 (Revised 2005)	100 mg/kg to 10000 mg/kg
2.	Textiles and Related Products [Garments and Clothing]	Blend composition (Polyester/Viscose/Cotton)	IS 3416 (Part 1): 1988 (RA 2017)	1 % to 100 %
3.	Textiles and Related Products [Woolen Blanket]	Wool %	IS 2006:1988 (RA 2017)	1 % to 100 %
4.	Textiles and Related Products [Dyed and Printed Cotton Fabrics, Polyester, Wool, Jute Fabrics, Jute Blends]	Color fastness to washing with soap or soap and soda	IS/ISO 105 (Part C 10): 2006 Test A1	Qualitative (Grade 1 to 5)
5.	Textiles and Related Products [Dyed Cotton, Polyester, Jute, Jute Blend Fabrics and also Jute Yarns]	Color Fastness to rubbing	IS 766:1988 (RA 2017)	Qualitative (Grade 1 to 5)

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**MECHANICAL TESTING**

<b>I. TEXTILE MATERIALS</b>				
1.	<b>Textiles and Related Products [Fibre]</b>	Bundle Strength of Jute & Mesta	IS 7032 (Part 7): 1986 (RA 2000)	20 N to 1000 N (2 kgf to 100 kgf) (0.8 g/tex to 417.7 g/tex)
		Universal Count of Jute Yarn	IS 570:1964 (RA 2000)	35 tex to 3,000 tex (1 to 87) lb/spindle
		Breaking Load Single strand	IS 1670:1991 (RA 2007)	5 N to 220 N (1 lbf to 50 lbf)
		Mass/ unit area (weight) of Fabric	ASTM D 3776/3776M-09 Reapproved (2013)	10 g/m <sup>2</sup> to 5000 g/m <sup>2</sup>
		Thickness of textile materials	ASTM D 1777-96 (2011) e1, Option 1	0.1 mm to 10 mm
		Warp (end) & filling (pick) count of woven fabric	ASTM D 3775-12	10 dm to 3000 dm (2.54 per inch to 762 per inch)
		Breaking strength & elongation of textile fabric (Grab method)	ASTM D 5034-09 Reapproved 2013	100 to 100000 N 1 % to 30 %
		Breaking strength & elongation of textile fabric (Strip method)	ASTM D : 5035-11 Reapproved 2015	100 N to 100000 N 1 % to 30 %
		Tearing Strength of fabrics by Trapezoid procedure	ASTM D: 5587- 2015	100 N to 100000 N
		Seam Strength of jute fabrics including their laminates	IS 9030:1979 (RA 2008)	23 kgf to 225 kgf (225 N to 2206 N)
		Maximum force and elongation at maximum force	IS 1969 (Part 1): 2009 ISO 13934-1:1999	100 N to 100000 N 1 % to 30 %

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2.	Textiles and Related Products [Geotextile]	Textile Properties of Geotextiles by the Wide Width strip method	ASTM D 4595-11	0.1 kN to 100 kN
		Measuring the normal Thickness of Geotextiles	ASTM D 5199-12 Procedure A	0.1 mm to 12 mm
		Static Puncture Strength of Geotextile and Geotextile related products using a 50 mm probe	ASTM D 6241 -2014	100 N to 100000 N
		Water Permeability of Geotextiles by Permittivity	ASTM D 4491/D 4491 M-17	5 l/m <sup>2</sup> /s to 500 l/m <sup>2</sup> /s
		Apparent Opening Size of a Geotextiles	ASTM D 4751-16 Method A	50 µm to 850 µm
		Grab Breaking load and elongation of Geotextiles	ASTM D 4632/D4632 M:15a	100 N to 100000 N 1 % to 30 %