

Laboratory	SGS Bangladesh Limited, Laboratory Services, IIUC Tower, Plot No. 9, Agrabad Commercial Area, SK Mujib Road, Chittagong, Bangladesh		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	11.03.2014
Certificate Number	T-2873	Valid Until	10.03.2016
Last Amended on	22.04.2015	Page	1 of 3

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.	Textile, Garments and Accessories	Breaking strength and Elongation (Grab Test)	ASTM D 5034: 2009 ISO 13934-2: 1999 BS EN ISO 13934-2: 1999 CAN/CGSB 4.2 No. 9.2 M-90 AS 2001.2.3.2: 2001	20 N to 2900 N 1 % to 50 %
		Breaking force and Elongation (Strip Method)	ASTM D 5035: 2011 ISO 13934-1: 2013 BS EN ISO 13934-1: 2013 CAN/CGSB 4.2 No. 9.1 M-90 AS 2001.2.3.1: 2001	20 N to 2900 N 1 % to 50 %
		Bursting strength Diaphragm Pneumatic	ASTM D 3786/D 3786: 2013 ISO 13938-1: 1999 CAN/CGSB 4.2 No.11.1: 1994 BS EN ISO 13938-2: 1999 ISO 13938-2: 1999	70 Kpa to 1000 Kpa (10 psi to 140 psi)
		Seam properties-Fixed opening	ISO 13936-1: 2004 BS EN ISO 13936-1: 2004 ASTM D 434: 1995	20 N to 200 N
		Seam properties-Fixed load	ISO 13936-2: 2004 BS EN ISO 13936-2: 2004 AS 2001.2.22: 2006	0.5 mm to 20 mm
		Seam properties- Seam strength	ISO 13935-1: 1999 BS EN ISO 13935-1: 1999 ISO 13935-2: 1999 BS EN ISO 13935-2: 1999 ASTM D1683-11 a AS 2001.2.20: 2004	20 N to 2900 N (5 lbf to 150 lbf)

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	Textile, Garments and Accessories	Tearing strength of fabrics (Elmendorf)	ASTM D 1424: 2013 ISO 13937-1: 2000 DIN/BS EN ISO 13937-1: 2000 AS 2001.2.8: 2001 CAN/CGSB-4.2 NO.12.3 M-94	1 N to 64 N (4 lbf to 14 lbf)
		Tearing strength of fabrics (Single Rip)	ASTM D 2261: 2013 BS 4303: 2005 ISO 13937-2: 2000 BS EN ISO 13937-2: 2000 ISO 13937-3: 2000 BS EN ISO 13937-3: 2000	20 N to 2990 N
		Tearing strength of fabrics (Double Rip)	ISO 13937-4: 2000	20 N to 2990 N
		Abrasion resistance	ISO 12947-1/2/3/4: 1998 Cor.1 2002 DIN/BS EN ISO 12947-1/2/3/4: 1998 ASTM D 4966: 2012	Upto 99999 rubs Grade: 1 to 5 wt. loss: 1 % to 50 %
		Piling Resistance (Pilling Box)	DIN EN ISO 12945-1: 2001 BS EN ISO 12945-1: 2001 CAN/CGSB 4.2 No. 51.1: 1995 ISO 12945-1: 2000	Grade: 1 to 5
		Pilling Resistance (Martindale)	ASTM D 4970: 2010 BS EN ISO 12945-2: 2000 ISO 12945-2: 2000	Grade: 1 to 5
		Pilling Resistance (Random Tumble)	ASTM D 3512: 2010 CAN/CGSB 4.2 No.51.2 M-87	Rating: 1 to 5

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	Textile, Garments and Accessories	Mass per unit area of fabric	ASTM D 3776/D3776 M: 2013 (Option C) DIN/BS EN 12127: 1998 ISO 3801: 1977 AS 2001.2.13: 1987(Method 5) CAN/CGSB 4.2 No.5.1 M-90 BS 2471: 2005	5 gsm to 500 gsm
		Threads per unit length	ASTM D3775: 2008 DIN EN 1049-2: 1994 BS EN 1049-2: 1994 AS 2001.2.5: 1991 ISO 7211/2:1984 CAN/CGSB 4.2 No.6 M-89	(10 to 100) per cm (25 to 250) per inch
		Stitch Density	ASTM D 3887: 96 (2008) CAN/CGSB 4.2 No 7 M-88 AS 2001.2.6: 2001 BS 5441: 1988	(10 to 100) per cm (25 to 250) per inch
2.	Zipper	Zipper Torque test	ASTM D 2061: 2007 16 CFR 1500.53: 2008 EN 71-1: 2009 ASTM F 963: 2011	(2.3 to 4.6) kg.cm (2 lb to 4 lb) inch

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