

<b>Laboratory</b>	<b>Intertek India Private Limited, 17/F, Industrial Suburb, 2nd Stage, Industrial Area, Yeshwanthpur, Bangalore, Karnataka</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025:2005</b>		
<b>Discipline</b>	<b>Mechanical Testing</b>	<b>Issue Date</b>	<b>18.12.2013</b>
<b>Certificate Number</b>	<b>T-1362</b>	<b>Valid Until</b>	<b>17.12.2015</b>
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<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
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#### **TEXTILES & RELATED PRODUCTS**

<b>1.</b>	<b>Textile &amp; Garment</b>	Tensile (Strip) Strength Elongation	ISO 13934-1-2013 ASTM D 5035-2011 GB/T 3923.1:1997	Strength:10 N to10 kN Elongation:1% to 200%
		Tensile (Grab) Strength Elongation	BS EN ISO 13934-2-1999 ASTM D 5034-2009 (2013) GB/T 3923.2:1998	Strength:10 N to10 kN Elongation:1% to 200%
		Tear Strength (Elmendorf)	ASTM D 1424-2009 (2013) BS EN ISO 13937-1-2000 GB/T 3917.1:2009	3.1 N to 100 N
		Tear Strength (Single rip)	ASTM D 2261-2013 BSEN ISO 13937-2-2000 GB/T 3917.2:2009	3.1 N to 100 N
		Tear Strength (Wing Tear)	BSEN ISO 13937-3:2000	10N to 10kN
		Bursting Strength	ISO 13938-1-1999 (E)  ASTM D 3786 / D 3786M-2013	3 kg/ cm <sup>2</sup> to11 kg/ cm <sup>2</sup>  68.9 kPa to 1240 kPa (10 psi to 180 psi)
		Bursting Strength (Steel Ball)	GB/T 19976:2005	10N to 10kN
		Seam properties	BS 3320:1988 (2002) BS EN ISO 13936-1:2004 BS EN ISO 13936-2:2004 BS EN ISO 13935-2-1999 ASTM D 1683-11a FZ/T 81007-2003, Section 4.4.5 Annex A & Section 4.4.6 Annex B	10 N to 10kN

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Textile & Garment	Threads per Unit Length (Woven & fabric construction)	ASTM D 3775-2012 BS EN 1049-Part 2 -1994	Upto 80 per cm (Up to 200 per inch)
		Stitch Density (knitted fabric)	BS 5441-1988 (2012) ASTM D 3887-1996(2008)	Upto 200 per inch (Upto 8 per mm)
		Fabric Mass per Unit Area	BS 2471-2005 ISO 3801-1977-Method 5 ASTM D 3776/ D 3776 M-2009 a- Option C (2013) BS EN 12127-1998	Upto 1000 gsm
		Fabric Width	ISO 3932-1976 ISO 22198:2006 ASTM D 3774- 96(2012)	1 cm to 300 cm
		Distortion in bowed and skewed fabrics	BS 2819-1990 ASTM D 3882-(08) 2012	Upto 50%
		Flammability of General Clothing Textiles	ASTM D 1230-2010 16CFR Part 1610-2008 BS EN 14878:2007 BS EN ISO 6941:2003	1 sec. to 99 sec.
		Pilling Resistance (Pilling Box)	BS EN ISO 12945-1-2001	Grade1 to Grade 5
		Pilling Resistance (Martindale)	ASTM D 4970/4970M-10 e1	Grade1 to Grade 5
		Pilling Resistance (Random Tumble)	ASTM D 3512/3512M-10 e2	Grade1 to Grade 5
		Pilling Resistance (Modified martindale)	BS EN ISO 12945-2-2000	Grade1 to Grade 5
		Pilling Resistance	GB/T 4802.1:2008	Grade1 to Grade 5

(Circular Locus)

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	<b>Textile &amp; Garment</b>	Abrasion Resistance (Martindale Specimen break down)	ASTM D 4966-2012	10 Cycles to 1,00,000 Cycles Grade 1 to Grade 5
		Abrasion Resistance (Martindale Specimen break down)	BS EN ISO 12947- Part 1 & 2-1999	10 Cycles to 1,00,000 Cycles Grade 1 to Grade 5
		Water Repellency: Spray Test	AATCC 22 –2010 ISO 4920 - 2012	Ratings : 0, 50, 70, 80, 90 and 100.
		Absorbency of Textiles	AATCC 79- 2010	Up to 60 seconds / 60+ seconds.
		Stretch & Recovery	ASTM D 3107-2007 (2011) ASTM D 2594-04(2012) ASTM D 4964-96(2012) e1 BS EN 14704 Part 1-2005 BS 4952 Part 2.4-1992	Up to 400%
<b>2.</b>	<b>Toys &amp; Textile Accessories</b>	Determination of Sharp Points Under a force of 4.45 N (1 Pound)	16 CFR 1500.48 ASTM F 963:2001(Section 4.9)	Qualitative
		Determination of Sharp Edges Under a force of upto 8.90 N (2 Pound)	16 CFR 1500.49 ASTM F 963:2001(Section 4.7)	Qualitative
		Small Parts-Chocking Hazard Test(Small part cylinder of 31.71 mm inner diameter)	16 CFR 1501 ASTM F 963:2001(Section 4.6)	Qualitative
		Determination of Torque Test Upto 9.177 kgfcm (Upto 7.96 inch pound)	16 CFR 1500.51-53 Section (e)	Qualitative

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	<b>Toys &amp; Textile Accessories</b>	Determination of Tension Test upto 196.1N (Upto 20 kg or 44 Pounds)	16 CFR 1500.51-53 Section (f)	Qualitative
		Determination of Impact Test as per the standard (Upto 200cm height or 6.6 feet)	16 CFR 1500.51-53 Section (b)	Qualitative
		Determination of Compression Test upto 196.1N (Upto 20 kg or 44 Pounds)	16 CFR 1500.51-53 Section (g)	Qualitative
		Determination of Flexure Test through 120° arc up to 67 N (Upto 6.83 kg or 15 Pounds)	16 CFR 1500.51-53 Section (d)	Qualitative
		CPSC Drawstrings Guideline on Children's upper outer wear / clothing a) Presence of Drawstrings at Hood & Neck area. b) Presence of drawstrings at Waist & Bottom area or lower of garments. c) If Present: I. Is the length of drawstring outside drawstring channel more than 75 mm when the garment is expanded to its fullest width. II. Presence of Toggles, Knots or any other decorative attachments at the free end of drawstring. III. Is the drawstring bar tacked, if it is one continuous string.	ASTM F 1816:2009 (RA 2004) BS EN 14682 –2007 CPSC 208	Qualitative