Laboratory	**Testtex India Laboratories Pvt. Ltd., H. O. & Central Laboratory, 301-304, Premson's Industrial Estate, Caves Road, Jogeshwari (East), Mumbai, Maharashtra**			
Accreditation Standard	**ISO/IEC 17025: 2005**			
Discipline	**Mechanical Testing**	**Issue Date**	**04.10.2014**	
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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
I.	**TEXTILES MATERIALS**			
1.	**Textiles & Textile Materials**	Woven & knit materials :- Count of Yarn removed from fabrics	In-house Method No. TTI – 007:2006 ISO 7211-5:1984 (Method A)	(6^s to 120^s) Ne (40 to 900) Denier
		Woven fabrics:- Ends & Picks	ASTM D 3775 - 12 ISO 7211-2 : 1984 IS 1963 : 2004	(5 to 275) Threads/cm (12 to 700) Threads/inch
		Carpets:- i) Tufts /or Loops /100 mm ii) Spaces /100 mm iii) Tufts per area of 100 cm^2	ISO 1763 : 1986	 41 to 100 41 to 100 100 to 5000
		Knits :- Wales & Courses	ASTM D 3887 : 96 (2008) BS 5441 : 1988	(5 to 225) Loops / cm
		Thickness	ASTM D 1777 – 96 (2011) e1 ISO 5084:1996 IS 7702 : 2012	(0.1 to 10) mm
		Mass Per Unit Area Mass Per Unit Length	ASTM D 3776 -09a (2013) ISO 3801 : 1977 IS 1964 : 2001 (RA 2006) BS EN 12127 : 1998	(10 to 1000) g /m^2

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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
	Textiles & Textile Materials	Woven fabrics:- Maximum Breaking Force - Strip Test	ASTM D 5035 -11 ISO 13934-1 : 2013 IS 1969 Part -1 : 2009	(5 to 8000) N
		Woven fabrics:- Maximum Breaking Force - Grab Test	ASTM D 5034 - 13 ISO 13934-2 : 2014 IS 1969 : Part 2 : 2010	(5 to 3000) N
		Woven fabrics:- Seam Rupture using Grab Method	ASTM D 1683 / D 1683 M -11a ISO 13935-2 : 2014	(5 to 490) N
		Woven fabrics:- Seam resistance of yarn at a seam of woven fabrics: Fixed seam opening method	ISO 13936-1 : 2004	(5 to 490) N
		Tear Strength (Elmendorf Method)	ASTM D 1424 -13 ISO 13937-1 : 2000 IS 6489 : 1993 (RA 2009)	(3 to 54) N
		Bursting Strength - Diaphragm Method	ASTM D 3786 / D 3786 M - 13 ISO 13938 - 1 : 1999 IS 1966 - Part 1: 2009	(210 to 1375) kPa (2.1 to 14) kg/cm^2
		Pilling Resistance - ICI Pill Box Method	ISO 12945-1 : 2001	Grade 1 to 5

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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
	Textiles & Textile Materials	Pilling Resistance -Random Tumble Method	ASTM D 3512 / D 3512 M - 10 e2	Grade 1 to 5
		Width of fabrics	ASTM D 3774 : 96 (2012) ISO 22198 : 2006 IS 1954 : 1990 (RA 2007)	(1 to 300) cm
		Length of fabrics	ISO 22198 : 2006	0.05 m to 100 m
		Dimensions of rectangular textile floor coverings	ISO 3018-1974	Length : (20 to 300) cm Width : (20 to 300) cm
		Single Yarn Strength & R.K.M	ISO 2062 : 2009 ASTM D 2256 / D 2256 M – 10 e1 IS 1670 : 1991 (RA 2007)	Breaking Strength : (1 to 300) N R.K.M : (5 to 50) g/tex
		Count (Ne), Breaking Strength & Count Strength Product of Yarn in Skein form	IS 1671:1977 (RA 2007) ASTM D 1578 : 1993 (2011)	Count: (6 to 120) Ne Lea Strength : (5 to 600) N
		Button attachment/ Pull off Strength Snap Pull Off Strength : Stud Socket	In-house Method No. TTI-014:2006	(1 to 300) N

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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
		Resistance to Unsnap of Snap Fastener i) Snap action strength ii) Lateral holding strength	ASTM D 4846 - 96 (2011)	(1 to 300) N
		Zipper Test: i) Top stop strength ii) Slider pull, pull-off strength iii) Bottom Stop holding stringer separation strength iv) Chain Crosswise Strength v) Bottom stop holding strength	ASTM D 2061 -13	(1 to 600) N
		i) Puller attachment strength ii) Top Stop Strength iii) Closed end strength iv) Lateral strength v) Slider locking strength	BS 3084 : 2006	(1 to 600) N
2.	**Rubber or Plastic Coated Fabric**	Tear Load (CRE)	BS EN ISO 4674 – Part 1 : 2003 BS EN ISO 20344 : 2011	(1 to 500) N
		Tear Load (Ballistic Pendulum Method)	BS EN ISO 4674 – Part 2 : 1998	(1 to 62) N
		Density	ISO 2781: 2008	(0.1 to 10) mg/ m^3

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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
II.	**PLASTICS, RUBBER & LEATHER**			
1.	**Leather and Leather products**	Tear Load (Single Edge Tear)	BS EN ISO 3377 – Part 1 : 2011	(1 to 500) N
		Tear Load (Double Edge Tear)	BS EN ISO 3377 – Part 2 : 2002	(1 to 500) N
		Thickness	ISO 2589 : 2002	(0.01 to 10) mm
2.	**Footwear**	Tear Strength (Uppers , Linings & in socks)	ISO 17696 : 2004	(1 to 500) N
		Tensile Strength & Elongation (Uppers)	ISO 17706 : 2003	(1 to 30) N/ mm (1 to 500) %
		Corrosion resistance (For metallic accessories)	ISO 22775 : 2004	Grade 1 to 5
		Indentation Hardness by means of a Durometer (Shore hardness)	ISO 868 : 2003	(1 to 100) Shore A
		Upper Sole Adhesion Strength	ISO 17708 : 2003 BS EN ISO 20344 : 2011	(0.1 to 20.0) N / mm

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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
3.	**Packaging Materials for Natural Mineral Water, Packaged Drinking Water and Food products:-**	Capacity	IS 2798 :1998	100 ml to 25 litres
		Wall Thickness	IS 2798 :1998	0.5 mm to 10 mm
		Transparency	IS 15410:2003 Annex-A	1% to 100 %
	i) Plastics Bottles / Containers (Jar, Glass, Cups)	Leakage Test [A] Closure Leakage [B] Vibration Leakage [C] Air Pressure Leakage	IS 2798 :1998	Qualitative
	ii) Plastic Cap (Closures) of Containers and Foil (for sealing of Plastic Cup/Glasses)	Drop Test	IS 2798 :1998	Qualitative
		Migration Test	IS 9845 :1998	(0 to 60) mg/l or (0 to10) mg/dm^2
		Water Potability Test	IS 15140: 2003 Annex -B	Qualitative
	iii) Polyethylene Flexible Pouches	Odour	IS 15609 : 2005	Qualitative
		Thickness	IS 2508 : 1984	(10 to 100) µm
		Width	IS 15609 : 2005	25 mm to 1000 mm
		Overall Migration	IS 9845 : 1998	(0 to 60) mg/l or (0 to10) mg/dm^2
		Tensile Strength Elongation at Break	A-4 of IS 2508 :1984	(100 to 5000) kg/cm^2 (100 to 20000) %

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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
	Polyethylene Flexible Pouches	Dart Impact Resistance	A-6 of IS 2508:1984	(0.5 to 6.0) N (50 to 600) gf
		Vibration Leakage Test	IS 15609:2005 Annex D	Qualitative
		Water Potability Test	IS 15609 :2005 Annex E	Qualitative
		Stack Load Test	IS 15609: 2005 Annex. F	Qualitative
		Drop Test	IS 15609: 2005 Annex. G	Qualitative
		Ink Adhesion Test for Printed Pouch	IS 15609: 2005 Annex. H	Qualitative
		Product Resistance Test for Printed Pouch	IS 15609: 2005 Annex. J	Qualitative
		Overall Migration of Constituents	IS 9845 :1998	(0 to 60) mg/l or (0 to10) mg/dm^2
		Colour Migration	IS 9845:1998 (Section 11)	Qualitative
	iv) Printed Containers for Plastic Feeding Bottles	Capacity	IS 14625 : 1999 (Clause 4.4.1)	(100 to 500) ml
		Neck Dimension	IS 14625 : 1999 (Clause 4.5)	(30 to 40) mm
		Wall Thickness	IS 2798 :1998	(0.5 to 10) mm

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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
	Printed Containers for Plastic Feeding Bottles	Environmental Stress- Crack Resistance	IS 8747 : 1977 (Method 1)	Qualitative
		Transparency	IS 14625 : 1999 (Clause 4.7.2)	(1 to 100) %
		Leakage Test	IS 14625 :1999 (Clause 4.7.3)	Qualitative
		Drop Test	IS 14625 :1999 (Clause 4.7.4) Annex C	Qualitative
		Ageing Resistance	IS 14625: 1999 (Clause 4.7.5)	(0 to 20) %
		Compressive Deformation Resistance	IS 14625: 1999 (Clause 4.7.6)	(0 to 20) %
		Product Resistance Test for Printed Containers	IS 2798 : 1998 (Method 14)	Qualitative
		Migration Test	IS 9845 :1998	(0 to 120) mg/l or (0 to 20) mg/dm^2

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