Laboratory Indian Institute of Packaging, LUX-3, Industrial Estate, Sanath Nagar,

Hyderabad, Telangana

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6968 (in lieu of T-3803) Page 1 of 4

Validity 15.02.2018 to 14.02.2020 Last Amended on 05.03.2018

SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are	Range of Testing / Limits of Detection
			performed	

MECHANICAL TESTING

I.	PLASTICS AND P	OLYMERS		
1.	Paper & Paper Board	Grammage/ Substance	IS 1060 (Part 1): 1966 (RA 2016) Cl.6.2.1	1 g/m² to 350 g/m²
		Bursting Strength	IS 1060 (Part 1): 1966 (RA 2016) Cl.12.5	0.2 kg/cm² to 10 kg/cm²
		Burst Factor	IS 1060 (Part 1): 1966 (RA 2016) Cl.12.5.4	5 to 50
		Burst Index	IS 1397 (RA 2008) CI.5.5 IS 1060 (Part 1) (RA 2016) CI.12.5.4	0.5 kpam²/g to 50 kpam²/g
		Tensile Strength	IS 1397 (RA 2008) CI.5.5 IS 1060 (Part 1) (RA 2016) CI.12.3.5.2	1 kgf to 2000 kgf
		Elongation	IS 1397 (RA 2008) C.5.5 IS 1060 (Part 1) (RA 2016) Cl.12.3.5.2	0.1 % to 100 %
		Tensile Index	IS 1397 (RA 2008) Cl.5.5, IS 1060 (Part 1) (RA 2016) Cl.12.3.5.2	0.10 Nm/gm to 70 Nm/gm
		Breaking Length	IS 1397 (RA 2008) CI.5.5 IS 1060 (Part 1) (RA 2016) CI.12.4.1	1 m to 7000 m
		Moisture Content	IS 1397 (RA 2008) CI. 5.5 IS 1060 (Part 1) (RA 2016) CI. 9.4	0.01 % to 20 %

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Cobb Test	IS 1397 (RA 2008) Cl. 5.5 IS 1060 (Part 1) (RA 2016) Cl. 13.2.3.7	0.01 gsm to 600 gsm
2.	Blow Moulded Plastics	Closure Leakage Test (Keeping on Floor)	IS 6312:1994 (RA 2010) Cl. 8.3, Annexure D	Qualitative
	Containers	Closure Leakage Test	IS 2798:1998 (RA 2009) Cl. 6.1 & IS 7959:1987 (RA 2009) Cl. 10.1.1 (Apl'. A)	Qualitative
		Drop Test	IS 6312:1994 (RA 2010) Cl. S.4.1	500 to 1800 mm
3.	HDPE Bags	Denier	IS 7703L1990 (RA 2010)	300 D to 5000 D
		Mesh	IS 1963:2004 (RA 2008)	4 to 100 no of threads per dm
		No. of stitches of Seam	IS 11652:2000 (RA 2010) CL. 4.3	1 dm to 15 dm
		Dimension	IS 11652:2000 (RA 2010) Cl. 6, Annexure A	10 mm to 3000 mm
4.	Plastic Film and Laminate	Tensile Strength	IS 2508:1984 (RA 2013) Cl. 4.4	0.01 kg/cm ² to 1000 kg/cm ²
		Elongation	IS 2508:1984 (RA 2013) Cl. 4.5	0.01 % to 1000 %
		Seal Strength	ASTM F88 (RA 2009)	0.01 kgf/15mm width to 100 kgf/15mm width
		Bond Strength	ASTMD 903-98 (RA 2010)	0.01 gf/15 mm width to 1000 gf/15 mm width
II.	PAPER & PAPER P	RODUCTS		
1.	Paper & Paper Board	Grammage/ Substance	IS 1060 (Part 1): 1966 (RA 2016) Cl.6.2.1	1 g/m² to 350 g/m²
		Bursting Strength	IS 1060 (Part 1): 1966 (RA 2016) Cl.12.5	0.2 kg/cm ² to 10 kg/cm ²

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		Burst Factor	IS 1060 (Part 1): 1966 (RA 2016) Cl.12.5.4	5 to 50
		Burst Index	IS 1397 (RA 2008) Cl.5.5 IS 1060 (Part 1) (RA 2016) Cl.12.5.4	0.5 kpam²/g to 50 kpam²/g
		Tensile Strength	IS 1397 (RA 2008) Cl.5.5 IS 1060 (Part 1) (RA 2016) Cl.12.3.5.2	1 kgf /15mm width to 2000 kgf/15mm width
		Elongation	IS 1397 (RA 2008) C.5.5 IS 1060 (Part 1) (RA 2016) Cl.12.3.5.2	0.1 % to 100 %
		Tensile Index	IS 1397 (RA 2008) Cl.5.5, IS 1060 (Part 1) (RA 2016) Cl.12.3.5.2	0.10 Nm/gm to 70 Nm/gm
		Breaking Length	IS 1397 (RA 2008) Cl.5.5 IS 1060 (Part 1) (RA 2016) Cl.12.4.1	1 m to 7000 m
		Moisture Content	IS 1397 (RA 2008) Cl. 5.5 IS 1060 (Part 1) (RA 2016) Cl. 9.4	0.01 % to 20 %
		Cobb Test	IS 1397 (RA 2008) Cl. 5.5 IS 1060 (Part 1) (RA 2016) Cl. 13.2.3.7	0.01 gsm to 600 gsm
2.	Corrugated Fibre Board Boxes	Internal Dimension	IS 2771 (Part 1): 1990 (RA 2008) Cl.6	5 mm to 1000 mm
		External Dimension	IS 2771 (Part 1): 1990 (RA 2008) CI.6	5 mm to 1000 mm

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Combined Internal Dimension	IS 2771 (Part 1): 1990 (RA 2008) CI.6	5 mm to 3000 mm
		No. of Ply	IS 2771 (Part 1): 1990 (RA 2008) Cl.4.1.1	Qualitative
		Style of Box	IS 6481:1971 (RA 2008)	Qualitative
		Type of Flute	IS 2771 (Part 1): 1990 (RA 2008) Cl. 4.2	Qualitative
		Rolling Test	IS 7028 (Part 5): 1987 (RA 2008)	Qualitative
		Drop Test	IS 7028 (Part 4): 1987 (RA 2013)	500 mm to 1800 mm
		Grammage (Individual Ply)	IS 7063 (Part IV): 1976 (RA 2008)	0.01 gsm to 600 gsm
		Edge Compression Test	IS 7063 (Part 2): 1976 (RA 2008)	0.01 N/m to 1000 N/m
		Flat Compression Test	TAPP1, T8080OM-13	0.01 Kpa to 1000 Kpa
		Cobb Test	IS 4006 (Part 1): 1985 (RA 2008) Cl.6.3	0.01 gsm to 600 gsm
		Bursting Strength	IS 1060 (Part 1): 1966 (RA 2016) Cl.12.5	1 kg/cm ² to 40 kg/cm ²
		Moisture Content	IS 1060 (Part I): 1966 (RA 2016) Cl.9.4	0.01 % to 20 %
3.	Metal Drum	Leakage Test (Air Pressure)	IS 1783 (Part 1): 1993 (RA 2010) Cl. 9.1	Qualitative
		Drop Test	IS 1783 (Part 1): 1993 (RA 2010) Cl.9.2	500 mm to 1800 mm
		Seam width	IS 1783 (Part 1): 1993 (RA 2010) Cl. 5	0.1 mm to 1000 mm
		Thickness	IS 1783 (Part 1): 1993 (RA 2010) Cl.6.2	0.01 mm to 25 mm
		Dimension	IS 1783 (Part 1): 1993 (RA 2010) Cl.5	10 mm to 1000 mm