

Laboratory	Man Made Textiles Research Association (Mantra), Ring Road, Surat, Gujarat		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.10.2016
Certificate Number	T-2305	Valid Until	30.10.2018
Last Amended on	07.11.2016	Page	1 of 4

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 (WOVEN & NON WOVEN)			
1.	Fibres, Yarns & Fabric	Identification Of Textile Fibres (Polyester, Nylon, Acrylic, Polypropylene, Spandex, Polyethylene, Viscose Rayon, Cotton, Silk, Wool)	IS 667: 1981 (2003)	Qualitative
		Identification Of Textile Fibre (Polyester, Nylon, Acrylic, Polypropylene, Spandex, Polyethylene, Viscose Rayon, Cotton, Silk, Wool)	AATCC-20	Qualitative
		Percent Composition Of Binary Mixtures Of Polyester Fibre With Cotton Or Regenerated Cellulose (P+C And P+V)	IS 3416: 1988 (1997) (RA 2013)	2 % to 100 %
		Quantitative Analysis Of Fibre Mixture Poly/Viscose	AATCC 20A 12: 2013	2 % to 100 %
		Quantitative Analysis Of Fibre Mixture By Physical Separation	AATCC 20A 10: (2013)	2 % to 100 %
		Quantitative Analysis Of Fibre Mixture Poly/Wool	AATCC 20A 12: 2013	2 % to 100 %
		pH Value Of Aqueous Extracts Of Textile Materials (Hot And Cold Method)	IS 1390: (2004)	1 to 14
2.	Finished Fabric	Colour Fastness To Washing With Soap Or Soap & Soda	IS/ISO 105-C10: 2006 [A1] 40 °C	Qualitative (Grade 1 to Grade 5)

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	Finished Fabric	Colour Fastness To Washing With Soap Or Soap & Soda	IS/ISO 105-10: 2006 [C3] 60 °C	Qualitative (Grade 1 to Grade 5)
		Rubbing Fastness	IS 766: 1988 (2004), AATCC C8: 2007	Qualitative (Grade 1 to Grade 5)
II.	INDUSTRIAL & FINE CHEMICALS			
1.	Chemical used in Textile Industry	Oxalic Acid Percentage By Mass	IS 501: (2005)	2 % to 100 %
III.	WATER			
1.	Water	pH	IS 3025 (Part 11): 2002	1 to 14
		Total Residue (Total Solids – Dissolved And Suspended) In Water	IS 3025 (Part 15): 2003 (RA 2009)	1 mg/l to 12000 mg/l
		Filterable Residue (Total Dissolved Solids) In Water	IS 3025 (Part 16): 2006	1 mg/l to 12000 mg/l
		Non-Filterable Residue (Total Suspended Solids) In Water	IS 3025 (Part 17): 2012	0.5 mg/l to 500 mg/l
		Total Hardness In Water	IS 3025 (Part 21): 2009	5 mg/l to 5000 mg/l
		Total Chloride In Water	IS 3025 (Part 32): 2003	0.5 mg/l to 7500 mg/l
IV.	POLLUTION & ENVIRONMENT			
1.	Effluent	Dissolved Oxygen (DO)	APHA (22 nd Edition) 4500-O B: 2012 IS 3025 (Part 38): 1989, (RA 2003)	1 mg/l to 10 mg/l

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	Effluent	Biochemical Oxygen Demand (BOD)	APHA (22 nd Edition) 5210 B: 2012 IS 3025 (Part 44): 1993 (RA 2009)	20 mg/l to 25,000 mg/l
		Chemical Oxygen Demand (COD)	IS 3025 (Part 58): 2006 (RA 2012)	20 mg/l to 50,000 mg/l
		Oil & Grease (Liquid –Liquid Partition Gravimetric Method)	APHA (22 nd Edition) 5520.B: 2012	1 mg/l to 100 mg/l
		Ammonical Nitrogen :- (Priliminary Distillaton Step And Titrimetric Method)	APHA (22 nd Edition) 4500 NH ₃ B & 4500 NH ₃ C: 2012	1 mg/l to 1400 mg/l
		Phenol & Phenolic Compounds (Direct Photometric Method)	APHA (22 nd Edition) 5530 D: 2012	0.01 mg/l to 100 mg/l
		Colour (Visual Comparison Method)	APHA (22 nd Edition) 2120.B: 2012	1 CU to 500 CU
		Copper	IS 3025 (Part 42): 1992 (RA 2003) and APHA (22 nd Edition) 3111 B: 2012 Direct Air-Acetylene Flame Method(AAS)	0.02 mg/l to 5 mg/l
		Nickel	IS 3025 (Part 54): 2003 and APHA (22 nd Edition) 3111 B: 2012 Direct Air-Acetylene Flame Method(AAS)	0.3 mg/l to 10 mg/l
2.	Soil & Solid Waste	pH Value	IS 2720 (Part 26): 1987 (RA 2007)	1 to 14

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	Soil & Solid Waste	Loss In Drying (At 105 °C)	APHA (22 nd Edition) 2540 B & E: 2012	0.1 % to 100 %
		Loss On Ignition (At 550 °C)	APHA (22 nd Edition) 2540 E: 2012	0.1 % to 100 %
		Ash (At 900 °C)	ASTM D 5142- 02a: 1998 (RA 2003)	0.1 % to 100 %

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