

## Mechanical scope

Sl	Product(s) / Material of test	Specific tests performed	Test Method / Standard against which tests are performed
1	Fibers	Staple Length for man made fibres	IS 10014 -1984 Part 1
2	Fibre	Linear density of single fibres	ASTM D 1577 - 07
3	Fibre	Tensile strength of single fibre	ASTM D 3822 - 07 ISO 5079 - 96
4	Yarn	Linear density of yarns	IS 1315-1977 IS 7703 - 1990 PART 1 ASTM D 1907 -07 ISO 2060 - 95
5	Yarn	Crimp and Count of yarn removed from fabrics	IS 3442-1980 ASTM D 1059 -01 ISO 7211 – 84 - 5
6	Yarn	Twist in yarn	IS 832-1985 ASTM D 1422 -99 ISO 7211 – 84 - 4 ASTM D 1423 -02
7	Yarn	Single yarn- Breaking load and %elongation at break	IS 1670-1991 ASTM D 2256 - 08
8	Yarns	Lea strength of yarns spun on cotton system (CSP)	IS 1671-1977
9	Yarn	Unevenness of polyester and polyamide flat yarn	IS 7703-1987 PART 5
10	Fabrics	Breaking load and % % elongation of woven textile fabrics	IS 1969-1985  ASTM D 5035 - 06 ISO 13934-99 -1
11	Fabric	Air Permeability	ASTM D 737 - 04 ISO 9237 - 95
	Non wovens	Air permeability	ISO 9073 – 15 -07
12	Fabric /Technical Textile	Abrasion Resistance (Martindale)	ASTM D 4966 - 07 ISO 12947 – 98 – 1
13	Fabric /Technical Textile	Taber Abrasion Resistance	ASTM D 3884 - 07
14	Fabric	Puncture Resistance	Index CBR
15	Fabric /Technical Textile	Apparent Opening Size	ASTM D 4751 - 95
16	Fabric /Technical Textile	Thermal resistance	ASTM D 1518 - 03
17	Fabrics	Pilling resistance of fabrics	IS 10971-1984

18	Fabrics	Length and width of woven fabrics	IS 1954-1990 ASTM D 3774 -04 ISO 22198 ASTM D 1907 ISO 2060 - 95
19	Fabric	Thickness of woven and knitted fabrics	IS 7702-1975, ASTM D 1777 - 07
20	Fabric	Mass per unit length and mass per unit area in woven fabrics	IS 1964-2001, ASTM D 3776 -07 ISO 7211 – 84 - 6
21	Fabric	Threads per unit length in woven fabrics	IS 1963-1981 ASTM D 3775 - 08 ISO 7211 – 84 – 2
22	Fabric	Recovery from creasing of textile fabrics by measuring the angle of recovery	IS 4681-1981
23	Fabric	Stiffness (Bending Length)	ASTM D 1388 – 07 Option A
24	Fabric /Technical Textile	Breaking strength by Wide width method %Elongation	ASTM D 4595 - 94 ISO 10319 - 96
25	Fabric	Grab Strength %Elongation	ASTM D 5034 ISO 13934 - 99 – 2
	Fabric /Technical Textile	Tensile strength (Grab Method) %Elongation	ASTM D 4632 – 91 ISO 13934-1999 Part-2
	Non wovens	Tensile strength (Grab Method) %Elongation	ISO 9073 – 18
26	Fabric	Tear strength (woven) (Nonwoven)	ASTM D 2261–07(a) ISO 13937 -2000– 2 ASTM D 5733 - 95
27	Fabric /Technical Textile	Trapezoid tear strength	ASTM D 4533 - 91
28	Fabric	Failure in sewn seams of woven fabrics	ASTM D 1683:2007
	Fabric	Seam slippage and Seam strength	ISO 13936-1:2004 ISO 13935-2:1999
29	Fabrics	Bursting strength and bursting distension of fabrics: diaphragm method	IS 1966-1975, ASTM D 3786 - 08 ISO 13938 - 99 – 2

## Chemical scope

S No	Product / material of Test	Specific test performed	Test method specification against which tests are performed
1.	Fibre/ Yarn /Fabric	Identification of textile fibers.	IS: 667 -1981 Reaff. 2003 AATCC – 20 : 2007
2.	Fibre/ Yarn /Fabric	Percentage composition of binary mixture of protein fibre with certain other non-protein fibres (Method based on clean dry mass)	IS: 2006-1988 Reaff. 2004 (SASMIRA IHM-01 & IHM-03) AATCC – 20 A : 2008 ISO 1833 Parts 4:2006
.3	Fibre/ Yarn /Fabric	Percentage composition of binary mixture of regenerated cellulose and cotton (Method based on clean dry mass)	IS: 1889-1979, Part IV, Sulphuric acid method Reaff. 2005 (SASMIRA IHM-01 AATCC – 20 A :2008
4	Fibre/ Yarn /Fabric	Percentage composition of binary mixture of nylon 6 or nylon 6,6 with other fibres (Method based on clean dry mass)	IS: 2005-1988 Reaff. 2008 (SASMIRA IHM-01 & IHM-03) AATCC – 20 A :2008 ISO 1833Parts 7: 2006
5	Fibre/ Yarn /Fabric	Percentage composition of binary mixture of polyester fibre with cotton and regenerated cellulose (Method based on clean dry mass)	IS: 3416-Part 1, 2008(SASMIRA IHM-01 & IHM-03) AATCC – 20 A :2008 ISO 1833 Parts 11: 2006
6	Fibre/ Yarn /Fabric	Determination of pH value of aqueous extract of textile materials	IS: 1390-1983 Reaff. 2004 AATCC 81:2006 ISO 3071:2005
7	Yarn /Fabric	Determination of colorfastness of textile materials to washing 1. Change in shade 2. Staining on adjacent fabric	AATCC 61:2007 -1A IS/ISO 105 C10 :2006
8	Fibre/ Yarn /Fabric	Determination of colorfastness of textile materials to artificial light (xenon lamp) Rating on blue wool scale	IS: 2454-1985Reaff. 2006 AATCC -16: 2004 option 3 ISO : 105 BO2:2002
9	Fibre/ Yarn /Fabric	Determination of colorfastness of textile materials to perspiration (Acidic & Alkaline) 1.Change in shade 2.Staining on adjacent fabric	IS: 971-1983 (Reaffirmed 2004) AATCC 15:2007 (acidic only) ISO 105-E04-2008
10	Fibre/ Yarn /Fabric	Determination of colour fastness of textile materials to dry-heat (using Fix-o-test instrument) (Staining on adjacent fabric)	IS: 4636 - 1988 Reaff. 2004
11	Fabric	Determination of water repellency of fabrics by cone test	IS: 7941-1976 Reaff.2004

12	Fabric	Determination of water repellency of fabrics by water spray test	IS: 390-1975 Reaffirmed 2003 AATCC 22:2005
13	Fabric	Determination of rubbing fastness of textile materials (Dry and Wet)	IS 766-1988 Reaff. 2004 AATCC 8:2007 ISO 105 X-12: 2001
14	Fabric	Colorfastness to water	IS 767RA2004 AATCC 107 :2007 ISO 105 :E01:2010
15	Fabric	Colorfastness to Sea water	IS 690 R.A2004 AATCC 106:2007 ISO 105 EO2:1996
16	Fabric	Colorfastness to organic solvent	IS 688 - 1988 RA 2004 ISO 105 –X05 :1994
17	Fabric	Dimensional changes on soaking in water	IS 2977- 1989 R.A 2005
18	Fibre/ Yarn /Fabric	Moisture Content	ASTM D 2495:2007
19	Fabric	Flammability	ASTM D 1230:1994 RA.2004
20	Fabric	Whiteness of Textiles	AATCC 110: 2005
21	Fabric	CMC Calculation of small color difference for acceptability	AATCC 173:2009
22	Yarn /Fabric	Identification of Class of Dyes on Textiles Material Cotton and other Cellulosic Fibers	IS 4472 –PART I :1967
23	Yarn /Fabric	Identification of Class of Dyes on Textiles Material Wool , Silk and other Protein Fibers	IS 4472 –PART 2 :1968
24	Yarn /Fabric	Identification of Class of Dyes on Textiles Material Man Made Fibers	IS 4472 –PART 3 :1973
25	Yarn /Fabric	Estimation of % Moisture on Finish , Ash and Fatty Matters on Grey and Finished Cotton Textiles Materials	IS 199:1989 R.A 2005
26	Yarn /Fabric	Color Fastness to Saliva	DIN – 53160-1:2010
27	Yarn /Fabric	Color Fastness to Rubbing with Organic Solvent	IS 3426:1986 RA 2004