



Testing Laboratory  
Required quantity of samples

Code	Description	AATCC/ ASTM	BS EB ISO	ISO	Required quantity min.	Packing Condition
CF1	<b><u>Colour Fastness Tests</u></b>					
	Colour Fastness to Washing (Temp.40°C - 95°C)	AATCC 61	105 C10 105 C06 105 C09	105 C10 105 C06 105 C09	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF2	Colour Fastness to Perspiration	AATCC 15	105 E04	105 E04	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF3	Colour Fastness to Rubbing	AATCC 8	105 X12	105 X12	15" x 15" Piece	Sample should cover by Polyurethane bag.
CF4	Colour Fastness to Light	AATCC 16	105 B02	105 B02	4" x 4" Piece	Sample should cover by Polyurethane bag.
CF5	Colour Fastness to Water	AATCC 107	105 E01	105 E01	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF6	Colour Fastness to Sea Water	AATCC 106	105 E02	105 E02	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF7	Colour Fastness to Chlorinated Water	AATCC 162	105 E03	105 E03	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF8	Colour Fastness to Dry Cleaning	AATCC 132	105 D01	105 D01	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF9	Colour Fastness to Heat - Dry	AATCC 117	105 P01	105 P01	12" x 12" Piece	Sample should cover by Polyurethane bag.
CF10	Colour Fastness to Heat (Hot Pressing)	AATCC 133	105 X11	105 X11	12" x 12" Piece	Sample should cover by Polyurethane bag.
CF11	Colour Fastness to Bleaching - in home laundering - (Sodium Hypochlorite)	AATCC 188			39" x 39" Piece/ One Garment	Sample should cover by Polyurethane bag.
CF12	Colour Fastness to Bleaching (Chlorine)		BS EN 20105- N01	105 N01	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF13	Colour Fastness to Bleaching Peroxide	AATCC 101	105 N02	105 N02	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF14	Colour Fastness to Nitrogen Oxide	AATCC 164	105 G01	105 G01	8" x 8" Piece	Sample should cover by Polyurethane bag.
CF15	Colour Fastness to Saliva and Perspiration	(DIN 53160)			8" x 8" Piece	Sample should cover by Polyurethane bag.
CF16	Colour Fastness to Non Chlorine Bleaching in home laundering	AATCC 172			8" x 8" Piece	Sample should cover by Polyurethane bag.

Code	Description	AATCC/ ASTM	BS EB ISO	ISO	Required quantity min.	Packing Condition
<b><u>Dimensional Stability &amp; Appearance Tests</u></b>						
DS1	Dimensional Stability to Washing	AATCC 135	5077, 3759	5077, 3759	39" x39" Piece (fabric) or 01 Garment	Sample should cover by Polyurethane bag.
DS2		AATCC 150	6330	6330		
	Spirality	AATCC 179				
DS3	Dimensional Stability to Relaxation		BS 4736	7771	39" x 39" Piece	Sample should cover by Polyurethane bag.
DS4	Dimensional Stability to Dry Cleaning	AATCC 158		3175-1,2	39" x 39" Piece	Sample should cover by Polyurethane bag.
DS5	Dimensional Stability to Steaming			3005	20" x 20" Piece	Sample should cover by Polyurethane bag.
DS6	Appearance of Fabric after Repeated home Laundering	AATCC 124		7768	39" x 39" Piece	Sample should cover by Polyurethane bag.
DS7	Appearance of Fabric after Repeated home Laundering	AATCC 143		7768	02 Garments	Sample should cover by Polyurethane bag.
DS8	Garment Cleansing				02 Garments	Sample should cover by Polyurethane bag.
<b><u>Water Resistant Tests</u></b>						
WT1	Water Resistance	AATCC 127		811	18" x 18" Piece	Sample should cover by Polyurethane bag.
WT2	Water Repellency (Spray Test)	AATCC 22		4920	18" x 18" Piece	Sample should cover by Polyurethane bag.
WT3	Water Absordency	AATCC 79			12" x 12" Piece	Sample should cover by Polyurethane bag.
<b><u>Safety Tests</u></b>						
S1	pH Value of the Textiles	ATCC 81		3071	30 g min.	Sample should cover by Polyurethane bag.
S2	Determination of Formaldehyde	AATCC 112 JIS L 1041		14184-1,2	10 g min.	Sample should cover by Polyurethane bag & wrap with foil
S3	Flammability - Inclined	ASTM D 1230			39" x 39" Piece	Sample should cover by Polyurethane bag.
S4	Flammability - Vertical / <b>16CFR Part 1610</b>	ASTM D 1230			39" x 39" Piece	Sample should cover by Polyurethane bag.
S5	Children clothing mechanical safety	BS 7907:2007	CEN /TR 16792		One Garment	Sample should cover by Polyurethane bag.
S6	Safety of toys (Small part, Sharp edge & Sharp point)	EN 71-1			One Item	Sample should cover by Polyurethane bag.
<b><u>Fabric Construction Tests</u></b>						
FC1	Weave - Simple (Structure) - Complicated			7211/1	4" x 4" Piece 22" x 22" Piece	Sample should cover by Polyurethane bag.
FC2	Fabric Yarn Count (Linear Density)- Woven & Knitted	ASTM D 1059		7211/5	22" x 22" Piece	Sample should cover by Polyurethane bag.
FC3	Mass Per Unit Area (Weight) - Woven & Knitted - Nonwoven	ASTM D 3776 ADTM D 6242		3801 9073-1	25" x 25" Piece	Sample should cover by Polyurethane bag.
FC4	Threads per Unit Length - Woven - Knitted	ASTM D 3775 ADTM D 6242		7211/2 9073-1	12" x 12" Piece	Sample should cover by Polyurethane bag.
FC5	Stitch Density - Knitted		BS 5441		12" x 12" Piece	Sample should cover by Polyurethane bag.
FC6	Fabric Width - Woven - Knitted	ASTM D 3774		22198	Full Width	Sample should cover by Polyurethane bag.

Code	Description	AATCC/ ASTM	BS EB ISO	ISO	Required quantity min.	Packing Condition
FC7	Twist in Yarn Removed from Fabric		7211/4		20" x 20" Piece	Sample should cover by Polyurethane bag.
FC8	Selvedge Width				Full Width	Sample should cover by Polyurethane bag.
FC9	No. of Ends in Selvedge					
FC10	Crimp of Yarn in Fabric	ASTM D 3883	7211/3		20" x 20" Piece	Sample should cover by Polyurethane bag.
FC11	Loop length				12" x 12" Piece	Sample should cover by Polyurethane bag.
FC12	Composition Analysis -Qualitative	AATCC 20	1833	1833	10g Min.	Sample should cover by Polyurethane bag.
	- Quantitative (2 Fibres or more)	AATCC 20A ASTM D629	1833 BS 4407	1833		
FC13	Colour Attributes				12" x 12" Piece	Sample should cover by Polyurethane bag.
FC14	Measurement of Garments (per piece)				One Garment	Sample should cover by Polyurethane bag.
FC15	Design				One Garment	Sample should cover by Polyurethane bag.
FC16	Print Type				12" x 12" Piece	Sample should cover by Polyurethane bag.
	<b><u>Performance Tests</u></b>					
P1	Tensile Strength - Strip Method (Breaking Strength)	ASTM D 5035	13934-1	13934-1	20" x 20" Piece	Sample should cover by Polyurethane bag.
	- Grab Method	ASTM D 5034	13934-2	13934-2		
P2	Tearing Strength - Strip Method (Breaking Strength)	ASTM D 1424	13937-1,		20" x 20" Piece	Sample should cover by Polyurethane bag.
	Trouser/Wing/Tongue Tearing		13937-2,3,4			
P3	Bursting Strength	ASTM D 3786	13938-1	13938-1	18" x 18" Piece	Sample should cover by Polyurethane bag.
P4	Seam Slippage	ASTM D 434	13936-1:	13936-1	20" x 20" Piece	Sample should cover by Polyurethane bag.
P5	Seam Strength - Strip	ASTM D 1683		13935-1	20" x 20" Piece	Sample should cover by Polyurethane bag.
	- Grab			13935-2		
P6	Air Permeability	ASTM D 737	BS 5636	9237	12" x 12" Piece	Sample should cover by Polyurethane bag.
P7	Blocking		BS 3424-11	5978:1990	12" x 12" Piece	Sample should cover by Polyurethane bag.
P8	Rot Proofness	AATCC 30			18" x 18" Piece	Sample should cover by Polyurethane bag.
P9	Types of Stitches				One Garment	Sample should cover by Polyurethane bag.
P10	Methods of test for elastic fabrics/ Tension and Elongation of Elastic Fabric	ASTM D 4964	BS 4952		2 m	Sample should cover by Polyurethane bag.
	Determination of elasticity of fabric		14704-1			
P11	Stretch properties of Knitted Fabric (Low Power)	ASTM D 2594			39" x 39" Piece	Sample should cover by Polyurethane bag.
P12	Stretch properties of Fabric Woven from (Stretch Yarn)	ASTM D 3107			39" x 39" Piece	Sample should cover by Polyurethane bag.
P13	Snap Attachment Strength (Button Attachment)	ASTM D 4846			10 Buttons attached to fabric	Sample should cover by Polyurethane bag.
P14	Zipper Attachment	ASTM D 2061			05 Zipper attached with fabric	Sample should cover by Polyurethane bag.
P15	Bond Strength (Laminated Fabric)	AATCC 136 ASTM D 2724			18" x 18" Piece	Sample should cover by Polyurethane bag.

Code	Description	AATCC/ ASTM	BS EB ISO	ISO	Required quantity min.	Packing Condition
<b><u>Wear Resistance Tests</u></b>						
WR1	Pilling Resistance		2945-1	2945-1	18" x 18" Piece	Sample should cover by Polyurethane bag.
WR2	Random Tumble Pilling	ASTM D 3512				
WR3	Abrasion Resistance	ASTM D 4966	12947-1,4	12947-2	12" x 12" Piece	Sample should cover by Polyurethane bag.
WR4	Martindale Pilling Test			12945-2	18" x 18" Piece	Sample should cover by Polyurethane bag.
<b><u>Fabric Handle Tests</u></b>						
FH1	Drape Co-efficient	BS 5058			39" x 39" Piece	Sample should cover by Polyurethane bag.
FH2	Wrinkle Recovery	AATCC 128	9867		39" x 39" Piece	Sample should cover by Polyurethane bag.
FH3	Crease Recovery	AATCC 66	2313-1		12" x 12" Piece	Sample should cover by Polyurethane bag.
FH4	Bow & Skewness- Woven & Knitted	ASTM D 3882	BS 2819	13015	Full width x 39" Piece	Sample should cover by Polyurethane bag.
FH5	Fabric Thickness - Woven	ASTM D 1777		5084	12" x 12" Piece	Sample should cover by Polyurethane bag.
	- Non Woven	ASTM D 5736		9073-2		
		CS/SLS	ISO	AATCC ASTM	Required quantity min.	Packing Condition
<b><u>Yarn Tests</u></b>						
Y1	Yarn Number (Count)-Skein	20	2060	ASTM D 1907	2000 m cone Min.	Sample should cover by Polyurethane bag.
Y1.1	Yarn Number (Count)-Short Length Method			ASTM D 1059	50 m Min.	Sample should cover by Polyurethane bag.
Y2	Lea Strength	24 560	6939	ASTM D 1578	2000 m cone Min.	Sample should cover by Polyurethane bag.
Y3	Single Yarn Strength	22	2062	ASTM D 2256	1000 m cone Min.	Sample should cover by Polyurethane bag.
Y4	Yarn Twist		2061	ASTM D 1423	1000 m cone Min.	Sample should cover by Polyurethane bag.
Y5	Yarn Evenness + Yarn Hairiness	674 1359	16549	ASTM D 1425	5000 m cone Min.	Sample should cover by Polyurethane bag.
Y7	Yarn Diameter			ASTM D 2255	5 m	Sample should cover by Polyurethane bag.
Y8	Yarn Type				10 m	Sample should cover by Polyurethane bag.
Y9	No. of Intermingles of yarn				100 m Min.	Sample should cover by Polyurethane bag.
Y10	No. of Filaments				1 m Min.	Sample should cover by Polyurethane bag.
Y11	Total Yarn Length (Sewing Thread)				1 cone	Sample should cover by Polyurethane bag.
Y12	Yarn Shrinkage			ASTM D 2259	1000 m cone Min.	Sample should cover by Polyurethane bag.
Y13	Yarn Shrinkage				5 m	Sample should cover by Polyurethane bag.
Y14	Mercerization - Microscope - Analytical				1 m 5 g	Sample should cover by Polyurethane bag.
Y15	Wax/Oil Content	JIS 1096 DBA			30 g Min.	Sample should cover by Polyurethane bag.
Y17	Fiber Length				10 m	Sample should cover by Polyurethane bag.
Y18	Twist in Yarn Removed from Fabric		7211/4		22" x 22" Piece	Sample should cover by Polyurethane bag.

Code	Description	AATCC/ LTD/ ASTM	BS EB ISO	ISO	Required quantity min.	Packing Condition
<b><u>General Test</u></b>						
G1	Moisture Content			6741	20 g Min.	Sample should cover by Polyurethane bag.
G2	Phenolic Yellowing	Tesco App D	X - 18	X - 18	12" x 12" Piece	Sample should cover by Polyurethane bag.
<b><u>Limited Brand Standards</u></b>						
L1	Clear Elastic Load and Elongation	LTD 15			40" Piece	Sample should cover by Polyurethane bag.
L2	Hook to Eye attachment	LTD 16			02 Garments	Sample should cover by Polyurethane bag.
L3	Cross Staining of Contrast Trims	LTD 22			02 Garments	Sample should cover by Polyurethane bag.
L4	Seam Stretchability	LTD 24			01 Garment	Sample should cover by Polyurethane bag.
L5	Appearance of Garentment after Laundering to Care Label (3 cycle)	LTD 34			02 Garments	Sample should cover by Polyurethane bag.
L6	Durability Wash Laundering to Care Label (3 cycle)	LTD 30			02 Garments	Sample should cover by Polyurethane bag.
L7	Power and Recovery (Stretch Farbic)	LTD 03 ASTM D 2594			36" x 36" Piece	Sample should cover by Polyurethane bag.
L8	Load Elongation and Recovery (Elastic)	LTD 06 ASTM D 5278			20" Piece	Sample should cover by Polyurethane bag.
L9	Bra Band Elongation	LTD 07			01 Garment	Sample should cover by Polyurethane bag.
L10	Colour Fastness to Chlorine Bleach	LTD 04			12" x 12" Piece	Sample should cover by Polyurethane bag.
L11	Colour Fastness to Non Chlorine Bleach	LTD 05			12" x 12" Piece	Sample should cover by Polyurethane bag.
<b><u>Leather and Footwear</u></b>						
LF1	Bond Strength	SATRA TM 404			One shoe	Sample should cover by Polyurethane bag.
LF2	Flex Resistance	SATRA TM 92			One shoe	
LF3	Measurement				One shoe	
LF4	Hardness			ISO 48-2,4	One shoe	
LF5	Identification of Leather				One shoe	
LF 6	Resistance to Abrasion			ISO 4649	One shoe	
LT 7	Thickness			ISO 2589	One shoe	
LF 8	Impact resistance				One shoe	
LF 9	Nail penetration resistance				One pair	
LF 10	Electrical Properties (Insulation Sole)				One shoe	
LF 11	Heat resistance (Insulation of sole shoe)				One shoe	
LF 12	Resistance to fuel oil				One shoe	
<b><u>Analytical Test</u></b>						
AT1	Azo Dyes			ISO 14362-1,3	10" x 10" Piece	Sample should cover by Polyurethane bag.
AT2	Phtalate Content			ISO 14389	10" x 10" Piece	
AT3	Heavy Metal Content (Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Mercury, Arsenic)			EN 71-3	10" x 10" Piece/ One garment/ Item/ Relevant area	Sample should cover by Polyurethane bag.
<b><u>Accessories Test</u></b>						
AC 1	Zipper strength test	ASTM D 2061			5 nos.	Sample should cover by Polyurethane bag.
AC2	Button pull strength				One garment	

Code	Description	Method	Qty.	Required quantity min.	Packing Condition
G1	<u>Absorbent Gauze</u>	SLS 395	up to 10000 m	4 x 1 m	Sample should cover by Polyurethane bag.
			10001-20000 m	6 x 1 m	
			20001-50000 m	9 x 1 m	
			50001-100000 m	13 x 1 m	

**Required quantity of samples for full specification test**

Code	Description /Sample Type	Required No. of Smples			Packing Condition
		Chemical test, Physical test and Design	Analytical test (Azo, Heavy metal & Formaldehyde)	For all tests	
	Fabric	02 meters	01 meter	03 meters	Sample should cover by Polyurethane bag. If Formaldehyde need to be tests , Sample should cover by Polyurethane bag and wrap with foil
	Shoe	02 pairs	---	02 pairs	
	Socks	03 pairs	01 pair	04 pairs	
	Towels	02 Nos.	---	02 Nos.	
	Banians	03 Nos.	01 No.	04 Nos.	
	Vests	03 Nos.	01 No.	04 Nos.	
	Mosquiro net	01 Nos	---	01 Nos	
	T-Shirt	03 Nos.	01 No.	04 Nos.	
	Shirts	03 Nos.	01 No.	04 Nos.	
	Bed Sheets	01 No.	---	01 No.	
	Pillow Cases	04 Nos.	01 No.	05 Nos.	
	Rain Coat	02 Nos.	---	02 Nos.	
	Berets	05 Nos.	02 Nos.	07 Nos.	
	Peak Caps	05 Nos.	01 No.	06 Nos.	
	Caps	08 Nos	02 Nos	10 Nos	
	Track Kit (Bottom & T Shirt)	03 kits	01 kits	04 kits	
	Belts	02 Nos.	---	02 Nos.	
	Jackets	03 Nos.	01 No.	04 Nos.	
	Rain Coat Jacket & Trouser	03 kits	01 kit	04 kits	
	Luminouse Jackets	02 Nos.	01 No.	03 Nos.	
	Mattress	01 No.	---	01 No.	
	Flannel Shirt	04 Nos.	01 No.	05 Nos.	
	Sarong Pijama	01 No.	01 No.	01 No.	
	Shirt Pijama	03 Nos.	---	04 Nos.	
	Air Mobile Kit (OG)	03 kits	01 kit	04 kits	
	Camouflage Kit				
	Jackets	03 Nos.	01 No.	04 Nos.	
	Trouser	03 Nos.	01 No.	04 Nos.	
	Cap	18 Nos.	02 Nos.	20 Nos.	
	Hat	18 Nos.	02 Nos.	20 Nos.	