

ශී ලංකා පේෂකර්ම සහ ඇඟලුම් ආයතනය ^{இலங்கை புடவைகள் மற்றும்} ஆடைகளுக்கான நிறுவகம் Sri Lanka Institute of Textile & Apparel



RQS LIST - 01

Testing Laboratory

	Required quantity of samples								
Code	Description	AATCC/	BS EB ISO	ISO	Required	Packing Condition			
Coue	Description	AATCC/ ASTM	D5 ED 150	150	quantity min.	Facking Conumon			
CF1	<u>Colour Fastness Tests</u>	ASTIVI	───	!	quantity min.	├ ────┤			
CLI		AATCC 61	105 C10	105 C10	8" x 8" Piece	Comple should cover by			
	Colour Fastness to Washing	AAICCUI		105 C10 105 C06		Sample should cover by			
	(Temp.40°C - 95°C)	1 '	105 C06			Polyurethane bag.			
	1	1	105 C09	105 C09	1 '				
CF2	Column Eastrang to Deveniration	AATCC 15	105 E04	105 E04	8" x 8" Piece	Sample should cover by			
Cr∠	Colour Fastness to Perspiration	AAICCIS	105 E04	100 LU-	8 XO FIELE	1			
	1 1	1	1	!	1 '	Polyurethane bag.			
CF3	Colour Fastness to Rubbing	AATCC 8	105 X12	105 X12	15" x 15" Piece	Sample should cover by			
Cr5	Colour Fasmess to Kubbing	AAICCO	100 /12	105 /12	15" X 15 1 IECE	Polyurethane bag.			
		1	1		1	Polyuremane bag.			
CF4	Colour Fastness to Light	AATCC 16	105 B02	105 B02	4" x 4" Piece	Sample should cover by			
Cr4	Colour rasiness to Light	AAICCIU	105 002	105 002	4 X 4 LIECE	Polyurethane bag.			
		1	1		1	roiyutemane bag.			
CF5	Colour Fastness to Water	AATCC 107	105 E01	105 E01	8" x 8" Piece	Sample should cover by			
CF5	Colour Fastness to water	AATCC 107	105 EU1	105 E01	o xo riece				
	1 1	1 '	1	!	1 '	Polyurethane bag.			
<u>014</u>	Colour Fastness to Sea Water	A ATCC 106	105 E02	105 E02		C			
CF6	Colour Fastness to Sea water	AATCC 106	105 EU2	105 E02	8" x 8" Piece	Sample should cover by			
	1 1	1 '	1		1 '	Polyurethane bag.			
017	C. L. F. C. L. Chlaringtod	A ATCC 162	105 E02	105 E02	0" 0" D :000				
CF7	Colour Fastness to Chlorinated	AATCC 162	105 E03	105 E03	8" x 8" Piece	Sample should cover by			
	Water	1 '	1	!	1 '	Polyurethane bag.			
<u>- T0</u>	C. 1. Factories to Deer Cleaning	AATCC 132	105 D01	105 D01	8" x 8" Piece	C			
CF8	Colour Fastness to Dry Cleaning	AAICC 152	102 101	105 D01	8" X 8" Piece	Sample should cover by			
	1 1	1 '	1		1 '	Polyurethane bag.			
CF9	Colore Francisco to Hoot Day	AATCC 117	105 P01	105 P01	12" x 12" Piece	Constant about de corror by			
Сгу	Colour Fastness to Heat - Dry	AAICCIII	103 101	105 P01	12" x 12" Fiece	Sample should cover by			
	1 1	1 '	1	!	1 '	Polyurethane bag.			
CF10	Colour Fastness to Heat (Hot	AATCC 133	105 X11	105 X11	12" x 12" Piece	Course should cover by			
CLIO	``	AATCC 155	105 711	105 ATT	12" X 12 TIECE	Sample should cover by			
	Pressing)	1	1	ļ	1	Polyurethane bag.			
CF11	Colour Fastness to Bleaching - in	AATCC 188	├─── ┼		39" x 39" Piece/	Sample should cover by			
CLIT	Ş	AATCC 100	1	!	39" x 39" Piece/ One Garment	1 5			
	home laundering - (Sodium Hypochlorite)	1 '	1	!	Une Garment	Polyurethane bag.			
	Hypochiorite	1 '	1	!	1 '				
CF12	Colour Fastness to Bleaching	i'	BS EN 20105-	105 N01	8" x 8" Piece	Sample should cover by			
CL17	(Chlorine)	1 '	BS EN 20105- N01	100 1101	δχοικα	Polyurethane bag.			
	(Chornie)	1 '		!	1 '	roiyuremane dag.			
CF13	Colour Fastness to Bleaching	AATCC 101	105 N02	105 N02	8" x 8" Piece	Sample should cover by			
CI'15	Peroxide		100 1002	100 1002	0 X0 1 KCC	Polyurethane bag.			
	reioxide	1 '	1	!	1 '	1 Olymennin oug.			
CF14	Colour Fastness to Nitrogen Oxide	AATCC 164	105 G01	105 G01	8" x 8" Piece	Sample should cover by			
CLII	Colour rashess to mitogen cauc	AIII CC 101	100 001	100 001	0 X0 1 KCC	Polyurethane bag.			
	1 1	1 '	1		1 '	101 y ur culture $\sigma \sigma_{0}$.			
CF15	Colour Fastness to Saliva and	(DIN 53160)	╂────╂─	!	8" x 8" Piece	Sample should cover by			
CLID	Perspiration	(DII (00100)	1		0 X0 1 KCC	Polyurethane bag.			
	reispiration	1	1	ļ	1	i olyutetiane bag.			
CF16	Colour Fastness to Non Chlorine	AATCC 172	└─── ╁		8" x 8" Piece	Sample should cover by			
CLU	Bleaching in home laundering		1		0 X0 1 KCC	Polyurethane bag.			
	Dieactilling in nonne naunaering	1 '	1		1 '	roiyurenane ouz.			
<u> </u>	<u> </u>	<u> </u>			<u> </u>	1			

Code	Description	AATCC/	BS EB ISO	ISO	Required	Packing Condition
		ASTM			quantity min.	
	Dimensional Stability & Appearan					
DS1	Dimensional Stability to Washing	AATCC 135	5077, 3759	5077, 3759	39" x39" Piece	Sample should cover by
DS2	Spirality	AATCC 150 AATCC 179	6330	6330	(fabric) or 01 Garment	Polyurethane bag.
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				39" x 39" Piece	Sample should cover by
	Repeated home Laundering	AATCC 124		7768		Polyurethane bag.
DS7	Appearance of Fabric after				02 Garments	Sample should cover by
	Repeated home Laundering	AATCC 143		7768		Polyurethane bag.
DS8	Garment Cleansing				02 Garments	Sample should cover by Polyurethane bag.
	Water Resistant Tests					· · · · · · · · · · · · · · · · · · ·
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.
	<u>Safety Tests</u>					
S1	pH Value of the Textiles	ATCC 81		3071	30 g min.	Sample should cover by Polyurethane bag.
S2	Determination of Formaldehyde	AATCC 112		14184-1,2	10 g min.	Sample should cover by
	2	JIS L 1041			0	Polyurethane bag & wrap
						with foil
S3	Flammability - Inclined	ASTM D 1230			39" x 39" Piece	Sample should cover by
						Polyurethane bag.
S4	Flammability - Vertical / 16CFR Part 1610	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.
	Safety of toys (Small part, Sharp edge & Sharp point)	EN 71-1			One Item	Sample should cover by Polyurethane bag.
	Fabric Construction Tests					
FC1	Weave - Simple (Structure)			7211/1	4" x 4" Piece	Sample should cover by
	- Complicated				22" x 22" Piece	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	ASTM D 3776		3801	25" x 25" Piece	Sample should cover by Polyurethane bag.
	- Nonwoven	ADTM D 6242		9073-1		- ,
FC4	Threads per Unit Length - Woven	ASTM D 3775		7211/2	12" x 12" Piece	Sample should cover by
	- Knitted	ADTM D 6242		9073-1		Polyurethane bag.
FC5	Stitch Density - Knitted		BS 5441		12" x 12" Piece	Sample should cover by Polyurethane bag.
FC6	Fabric Width - Woven	ASTM D 3774		22198	Full Width	Sample should cover by
	- Knitted					Polyurethane bag.
	Page 02 0f 06 Authori	zed by QM/MR	Re	vision No. 01	Issued D	ate : 31.05.2023

Code	Description		BS ER ICO	ISO	Roginad	Packing Condition
Coae	Description	AATCC/ ASTM	BS EB ISO	150	Required quantity min.	Packing Condition
FC7	Twist in Yarn Removed from		7211/4		20" x 20" Piece	Sample should cover by
	Fabric					Polyurethane bag.
FC8	Selvedge Width				Full Width	Sample should cover by
FC9	No. of Ends in Selvedge					Polyurethane bag.
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
1 011	zeep lengu					Polyurethane bag.
FC12	Composition Analysis	AATCC 20	1833	1833	10g Min.	Sample should cover by
	-Qualitative				0	Polyurethane bag.
	- Quantitative (2 Fibres or more)	AATCC 20A	1833	1833		
		ASTM D629	BS 4407			
FC13	Colour Attributes				12" x 12" Piece	Sample should cover by Polyurethane bag.
FC14	Measurement of Garments				One Garment	Sample should cover by
_	(per piece)					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.
	<u>Performance Tests</u>					
P1	Tensile Strength - Strip Method	ASTM D 5035	13934-1	13934-1	20" x 20" Piece	Sample should cover by
	(Breaking Strength)					Polyurethane bag.
7.0	- Grab Method	ASTM D 5034	13934-2	13934-2	00# 00# D	0 1 1 11 1
P2	Tearing Strength - Strip Method	ASTM D 1424	13937-1,		20" x 20" Piece	Sample should cover by
	(Breaking Strength) Trouser/Wing/Tongue Tearing		12027 2 2 4			Polyurethane bag.
	Trouser/ Wing/ Tongue Tearing		13937-2,3,4			
Р3	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
7.5				10005.1	00" 00" D	Polyurethane bag.
P5	Seam Strength - Strip	ASTM D 1683	12025 2	13935-1	20" x 20" Piece	Sample should cover by
P6	- Grab Air Permeability	ASTM D 737	13935-2 BC 5(2)	13935-2	12" x 12" Piece	Polyurethane bag. Sample should cover by
16	Air Permeability	A51M D 737	BS 5636	9237	12° x 12° Piece	Polyurethane bag.
P7	Blocking		BS 3424-11	5978:1990	12" x 12" Piece	Sample should cover by
1,	DIOCKING		00012111	0770.1770	12 X 12 1 1000	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/	ASTM D 4964	BS 4952		2 m	Sample should cover by
	Tension and Elongation of Elastic					Polyurethane bag.
	Fabric					
Dett	Determination of elasticity of fabric		14704-1		0 00 0 00 -	
P11	Stretch properties of Knitted Fabric	ASTM D 2594			39" x 39" Piece	Sample should cover by
P12	(Low Power) Stretch properties of Fabric Woven	ASTM D 3107	├ ──── ├		39" x 39" Piece	Polyurethane bag. Sample should cover by
1 12	from (Stretch Yarn)	A311VLD 3107			<i>37 x 37</i> r iece	Polyurethane bag.
P13	Snap Attachment Strength	ASTM D 4846	+		10 Buttons	Sample should cover by
1 10	(Button Attachment)	101010101010			attached to fabric	Polyurethane bag.
P14	Zipper Attachment	ASTM D 2061			05 Zipper	Sample should cover by
	**				attached with fabric	Polyurethane bag.
P15	Bond Strength	AATCC 136			18" x 18" Piece	Sample should cover by
	(Laminated Fabric)	ASTM D 2724				Polyurethane bag.
	Page 03.0f.06 Authori	zed by OM/MR		vision No. 01	Issued D	

Code	Description	AATCC/	BS EB ISO	ISO	Required	Packing Condition
		ASTM			quantity min.	
	<u>Wear Resistance Tests</u>					
WR1	Pilling Resistance		2945-1	2945-1	18" x 18" Piece	Sample should cover by
WR2	Random Tumble Pilling	ASTM D 3512				Polyurethane bag.
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.
	Fabric Handle Tests					
FH1	Drape Co-efficient	BS 5058			39" x 39" Piece	Sample should cover by
EI IO			00.67		201 201 D	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
1110		11110000	_010 1			Polyurethane bag.
FH4	Bow & Skewness-	ASTM D 3882	BS 2819	13015	Full width x	Sample should cover by
	Woven & Knitted				39" Piece	Polyurethane bag.
FH5	Fabric Thickness - Woven	ASTM D 1777		5084	12" x 12" Piece	Sample should cover by
	- Non Woven	ASTM D 5736		9073-2		Polyurethane bag.
		CS/SLS	ISO	AATCC	Required	· ·
	Yarn Tests	C5/5L5	150	AATCC	quantity min.	Packing Condition
Y1	Yarn Number (Count)-Skein	20	2060	ASTM D 1907	2000 m cone	Sample should cover by
11	fam Number (Count)-Skem	20	2060	A51WI D 1907	Min.	Polyurethane bag.
Y1.1	Yarn Number (Count)-Short			ASTM D 1059	50 m Min.	Sample should cover by
11.1	Length Method			A31WI D 1039	50 III WIII.	Polyurethane bag.
Y2	Lea Strength	24	6939	ASTM D 1578	2000 m cone	Sample should cover by
12		560	0,0,	10110101070	Min.	Polyurethane bag.
Y3	Single Yarn Strength	22	2062	ASTM D 2256	1000 m cone	Sample should cover by
					Min.	Polyurethane bag.
Y4	Yarn Twist		2061	ASTM D 1423	1000 m cone	Sample should cover by
					Min.	Polyurethane bag.
Y5	Yarn Evenness + Yarn Hairiness	674	16549	ASTM D 1425	5000 m cone	Sample should cover by
		1359			Min.	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
2/10					1000	Polyurethane bag.
Y12	Yarn Shrinkage			ASTM D 2259	1000 m cone	Sample should cover by
V/10	Verse Chairlan				Min.	Polyurethane bag.
Y13	Yarn Shrinkage				5 m	Sample should cover by Polyurethane bag.
Y14	Mercerization - Microscope				1 m	Sample should cover by
	- Analytical				5 g	Polyurethane bag.
Y15	Wax/Oil Content	JIS 1096			30 g Min.	Sample should cover by
		DBA			55 6 mm.	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
lÍ			, -			Polyurethane bag.
L					ı	, 0

Code	Description	AATCC/	BC EB ICO	ISO	Roginad	Proking Condition
Coae	Description	AATCC/ LTD/ ASTM	BS EB ISO	150	Required quantity min.	Packing Condition
	<u>General Test</u>	LID/ASIM			quantity min.	
G1	<u>General Test</u> Moisture Content			6741	20 g Min.	Sample should cover by
GI	Moisture Content			0/41	20 g Min.	Polyurethane bag.
G2	Phenolic Yellowing	Tesco App D	X - 18	X - 18	12" x 12" Piece	Sample should cover by
02	Thenone renowing	rescompp D	X - 10	X - 10	12 x 12 1 1000	Polyurethane bag.
	Limited Brand Standards					r ory areataine eag.
L1	Clear Elastic Load and Elongation	LTD 15			40" Piece	Sample should cover by
	0					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 Garement after	LTD 34			02 Garments	Sample should cover by
	Laundering to Care Label (3 cycle)					Polyurethane bag.
L6	Durability Wash	LTD 30			02 Garments	Sample should cover by
	Laundering to Care Label (3 cycle)					Polyurethane bag.
L7	Power and Recovery (Stretch Farbic)	LTD 03			36" x 36" Piece	Sample should cover by
I.O.		ASTM D 2594			2011 D:	Polyurethane bag.
L8	Load Elongation and Recovery	LTD 06 ASTM D 5278			20" Piece	Sample should cover by
L9	(Elastic) Bra Band Elongation	LTD 07			01 Garment	Polyurethane bag. Sample should cover by
L9	Dra Danu Elongation				01 Garment	Polyurethane bag.
L10	Colour Fastness to Chlorine Bleach	LTD 04			12" x 12" Piece	Sample should cover by
110	colour rustness to emornic bleach				12 × 12 1 1000	Polyurethane bag.
L11	Colour Fastness to Non Chlorine	LTD 05			12" x 12" Piece	Sample should cover by
	Bleach					Polyurethane bag.
	Leather and Footwear					, ,
LF1		SATRA TM 404			One shoe	
		SATRA TM 92			One shoe	
LF3	Measurement	01111111/2			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	Sample should cover by
LT 7	Thickness			ISO 2589	One shoe	Polyurethane bag.
LF 8	Impact resistance				One shoe	, 0
LF 9	Nail penetration resistance				One pair	
	Electrical Properties (Insulation So	le)			One shoe	
	Heat resistance (Insulation of sole	/			One shoe	
	Resistance to fuel oil				One shoe	
	<u>Analytical Test</u>					
AT1	Azo Dyes			ISO 14362-1,3	10" x 10" Piece	Sample should cover by
AT2	Phtalate Content			ISO 14389	10" x 10" Piece	Polyurethane bag.
AT3	Heavy Metal Content			EN 71-3	10" x 10" Piece/	Sample should cover by
	(Antimony, Barium, Cadmium,				One garment/	Polyurethane bag.
lÍ	Chromium, Cobalt, Copper, Lead, Nickel,				Item/ Relevant	
	Selenium, Mercury, Arsenic)				area	
	<u>Accessories Test</u>					
	Zipper strength test	ASTM D 2061			5 nos.	Sample should cover by
AC2	Button pull strength				One garment	Polyurethane bag.
	Page 05 0f 06 Authori	zed by OM/MR	_	vision No. 01	Issued D	

Page 05 0f 06

Code	Description	Method		Qty.	Required	Packing Condition
coue	Description	Witchiou		Q.y.	quantity min.	rucking conunion
G1	Absorbent Gauze	SLS 395		up to 10000 m		Sample should cover by
				10001-20000 m	6 x 1 m	Polyurethane bag.
				20001-50000 m	9 x 1 m	i oly di cultance sugi
			Ţ	50001-100000 m	13 x 1 m	
	Requi					
Code			-	No. of Smples		
		Chemical	Analytical			
		test, Physical	test (Azo,			
	Description /Sample Type	test and	Heavy metal	For all tests		Packing Condition
	Description/Sample Type	Design	&			
		0	Formaldehy			
			de)			
	Fabric	02 meters	01 meter		03 meters	
	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.	Sample should cover by
	Peak Caps	05 Nos.	01 No.		06 Nos.	Polyurethane bag.
	Caps	08 Nos	02 Nos		10 Nos	If Formaldehyde need to
	Track Kit (Bottom & T Shirt)	03 kits	01 kits		04 kits	be tests , Sample should
	Belts	02 Nos.			02 Nos.	cover by Polyurethane bag and wrap with foil
	Jackets	03 Nos.	01 No.		04 Nos.	bag and wrap with ton
	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	02 Naa	01 N.		04 Nac	
	Jackets	03 Nos. 03 Nos.	01 No.		04 Nos.	
	Trouser		01 No.		04 Nos. 20 Nos.	
	Cap	18 Nos.	02 Nos.			
	Hat	18 Nos.	02 Nos.		20 Nos.	