

# Textile Testing Laboratory

## 1. Testing Facilities

### Product Testing

#### a) Fabrics/ Apparel Products

Product	Standard	Product	Standard
Baby Nappies	SLS 1449	Knitted fabrics for Gent's & Ladies Underwear	SLS 837
Baby Nappy Cloth Towel	SLS 1450	Knitted Wests	SLS 283
Base Fabrics for Polymer Coating	SLS 838	Leather for Garments	SLS 1129
Classification & Terminology for Seams	SLS 1132	Nylon Sarees & Saree Materials	SLS 334
Classification & Terminology for Stitches	SLS 1133	Nylon Stretch Socks	SLS 400
Coated Fabrics	SLS 795	Plain Woven Cotton Shirting (Handloom)	SLS 766
Cotton Bed Sheet & Sheetings (Powerloom)	SLS 698	Plain Woven Cotton Shirting (Powerloom)	SLS 767
Cotton Bed Sheets (Handloom)	SLS 685	Plain Woven Handloom Pyjama Cloth	SLS 284
Cotton Furnishing Fabric	SLS 255	Polyester Blended Sarong	SLS 867
Cotton Poplins (Powerloom)	SLS 90	Polyester Cotton/Rayon Shirting Materials	SLS 369
Cotton Sarees/Saree Materials (Handloom & Powerloom)	SLS 100	Polyester Cotton/Rayon Suiting Fabrics	SLS 635
Cotton Sarongs(Handloom & Powerloom)	SLS 101	Printed Cotton Dress Fabric	SLS 480
Cotton Towel & Towelling	SLS 136	School Uniform Materials	SLS 1060
Descriptions for Woven Fabrics	SLS 1455	Sheeting for General Purposes	SLS 1062
Elastic Fabrics	SLS 999	Size Designation of Clothes-Gloves	SLS 527
Elastic Narrow Fabrics	SLS 272	Size Measurements for School Uniforms (Boys' & Girls')	SLS 256
Gent's Knitted Briefs	SLS 758	Tagged Boot & Shoe Laces (Cotton)	SLS 336
Handmade Batiks	SLS 456	Woven Table Napkins	SLS 1393
Interlinings for Shirts	SLS 368	Woven Umbrella Cloth	SLS 1307

#### b) Coir Products

Product	Standard	Product	Standard
Coir Fibre – Brown Fibre & Mixed Fibre	SLS 115/1	Coir Yarn	SLS 513
Coir Fibre – Retted White Fibre	SLS 115/4	Rubberized Coir Mattresses & Cushions	SLS 1333
Coir Fibre Pith Substrate	SLS 1219		

#### c) Footwear Products

Product	Standard	Product	Standard
EVA(Ethylene Vinyl Acetate) Sandals	SLS 1295	Men's Shoe	SLS 1290
Full-Chrome Shoe Upper Leather	SLS 624	Methods of Test for Personal Protective Footwear	SLS 1363
Ladies' Sandals	SLS 1294	Personal Protective Safety Footwear	SLS 1364

Ladies' Shoe	SLS 1291	Rubber Soled Canvas Shoes for General Purposes	SLS 465
Leather for Footwear	SLS 588	Safety Footwear-General Requirements	SLS 1252/2
Leather Military Boots	SLS 1176	Safety Footwear-Method of Test	SLS 1252/1
Men's Sandals	SLS 1293		

#### d) Mattresses

Product	Standard	Product	Standard
Latex Foam Rubber Mattresses & Cushions	SLS 1334	Rubberized Coir Mattresses & Cushions	SLS 1333
Polyurethane Foam Mattresses & Cushions	SLS 1335		

#### e) Other Products

Product	Standard	Product	Standard
Bowls for Alms made of Mild Steel for Buddhist Clergy	SLS 1308	Polyamide (Nylon) Fishing Nets	SLS 1274
Buddhist Flag	SLS 802	Polyamide Fibre Ropes	SLS 1453
Cotton Mosquito Netting	SLS 273	Polyester Fibre Ropes for Offshore Station keeping	SLS 1454
Eight Requisites (Ata pirikara) for Buddhist Clergy	SLS 1258	Polyester Fibre Ropes-Double Braid Construction	SLS 1452
Examination Rubber Gloves	SLS 951	Robes for Buddhist Clergy	SLS 1257
Fibre Ropes	SLS 1457	Rubber Bands	SLS 637
Fibre Ropes of Polyester/Polyolefin Dual Fibres	SLS 1456	Rubber Floor Mats (General Purpose)	SLS 952
File Cords	SLS 764	School Bags	SLS 1430
Household Rubber Gloves	SLS 532	Umbrella Ribs - Folding Type	SLS 321/2
Jute Bags	SLS 700	Umbrella Ribs - Non Folding Type	SLS 321/1
Mosquito Nets	SLS 1061	Umbrella-Folding Umbrella	SLS 1207/2
National Flag of Sri Lanka	SLS 693	Umbrella-Non Folding Umbrella	SLS 1207/1
Nylon Mosquito Netting for Domestic Use	SLS 839		

#### f) Paper/Tissue Products

Product	Standard	Product	Standard
Abrasive Paper	SLS 844	Paper Serviettes	SLS 1339
Black Cartridge Paper	SLS 1164	Paper Towels	SLS 1338
Carbon paper (Typewriter & pencil)	SLS 82	Photocopy Papers	SLS 1163
Drawing Boards	SLS 157	Printing Paper & Writing Paper	SLS 868
Drawing Sheets	SLS 433	School Drawing Books	SLS 852
Duplicating Paper	SLS 807	Stencil Paper	SLS 587
Envelopes, post cards & picture postcards	SLS 29	Toilet Tissues	SLS 798
Exercise Books	SLS 382	Typewriting Paper	SLS 834
Facial Tissues	SLS 1340		

#### g) Polypropylene/Polyethylene Products

Product	Standard	Product	Standard
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Polyethylene (PE) Sacks for Packaging of Food	SLS 1400	Polyethylene Shopping Bags	SLS 1399
Polyethylene Food Wrapping Sheet	SLS 1377	Polypropylene Woven Sacks for Packing	SLS 636
Polyethylene Garbage Bags	SLS 835		

## h) Sanitary/Hygienic Products

Product	Standard	Product	Standard
Absorbent Cotton	SLS 285	Cotton Drill Fabrics	SLS 333
Absorbent Cotton Gauze & Absorbent Cotton and Viscose Gauze	SLS 1414	Sanitary Towels	SLS 111
Absorbent Cotton Lint	SLS 337	Surgical Rubber Gloves	SLS 359
Bandage	SLS 172		

## i) Yarns/Sewing Threads

Product	Standard	Product	Standard
Coir Yarn	SLS 513	Polyamide (Nylon) Fish Net Twine	SLS 545
Core Spun Sewing Thread	SLS 1264	Polyester Cotton Yarn	SLS 711
Cotton Embroidery Threads	SLS 460	Polyester Viscose Yarn	SLS 1240
Cotton Sewing Threads	SLS 112	Spun Polyester Yarns-for Knitting	SLS 803/2
Grey Cotton Yarn (Handloom)	SLS 137/2	Spun Polyester Yarns-for Weaving (Conventional looms)	SLS 803/1
Grey Cotton Yarn (Hosiery)	SLS 137/3	Staple Spun Polyester Sewing Threads	SLS 757
Grey Cotton Yarn (Powerloom)	SLS 137/1	Twine- Jute Twine	SLS 356/2
Designation of Netting Yarns	SLS 155	Twine-Sunn Hemp Twine	SLS 356/1
Nylon 6 Yarn	SLS 903	Viscose Yarn	SLS 1214

## Test Methods

### a) Colour Fastness Tests

Test description	SLS Standard	Equivalent International Standard
✓ Colour Fastness to Chlorinated Water	SLS 1387/17	ISO 105-E03
✓ Colour Fastness to Heat (Hot Pressing)	SLS 198	ISO 105-X11
✓ Colour Fastness to Light	SLS 1387/50	ISO 105-B02
✓ Colour Fastness to Perspiration	SLS 1387/48	ISO 105-E04
✓ Colour Fastness to Rubbing	SLS 63	ISO 105-X12
✓ Colour Fastness to Sea Water	SLS 1387/49	ISO 105-E02
✓ Colour Fastness to Washing	SLS 1387/14	ISO 105-C06
✓ Colour Fastness to Water	SLS 1387/45	ISO 105-E01

### b) Dimensional Stability (Shrinkage) Tests

Test description	SLS Standard	Equivalent International Standard
✓ Dimensional Stability to Relaxation	-	ISO 7771
✓ Dimensional Stability to Washing (F-Dry)	SLS 1302	ISO 6330
✓ Dimensional Stability to Washing (T-Dry)	SLS 1302	ISO 6330

### c) Water Resistant Tests

Test description	SLS Standard	Equivalent International Standard
✓ Water Absorbency	-	AATCC79*

✓	Water Repellency (Spray Test)	SLS 287/1	ISO 4920
✓	Water Repellency of Fabrics (Bundensmann Rai Shower Test)	SLS 287/3	ISO 9865

\* AATCC - American Association of Textile Chemists and Colorists

#### d) Safety Tests

Test description		SLS Standard	Equivalent International Standard
✓	Flammability – Horizontal	-	JIS L 1091 (IM TL-3)*
✓	Flammability – Inclined	-	JIS L 1091 (IM TL-2)*
✓	Flammability – Vertical	-	JIS L 1091 (IM TL-1)*
✓	pH Value	SLS 86	ISO 3071

\* JIS-Japanese Industrial Standard

#### e) Wear Resistance Tests

Test description		SLS Standard	Equivalent International Standard
✓	Pilling Resistance	SLS 1243/1	ISO 12945-1

#### f) Fabric (Woven & Knitted) Construction Tests

Test description		SLS Standard	Equivalent International Standard
✓	Composition Analysis	SLS 1388	ISO 1833
✓	Crimp of Yarn in Fabric	SLS 50	ISO 7211/3
✓	Fabric Width-Woven	SLS 1356	ISO 22198
✓	Loop Length	-	-
✓	Mass per Unit Area	SLS 42	ISO 3801
✓	Measurement of Garments (per piece)	-	-
✓	Number of Ends in Selvedge	-	-
✓	Selvedge Width	-	-
✓	Stitch Density-Knitted	-	BS 5441*
✓	Threads per Unit Length	SLS 41	ISO 7211/2
✓	Twist in Yarn removed from Fabric	-	ISO 7211/4
✓	Weave/ Structure	-	ISO 7211/1
✓	Yarn Count (Linear Density)	SLS 44	ISO 7211/5

\* BS –British Standards

#### g) Performance Tests

Test description		SLS Standard	Equivalent International Standard
✓	Air Permeability	-	ISO 9237
✓	Blocking	-	ISO 5978
✓	Bond Strength (Laminated Fabric)	-	AATCC 136* ASTM 2724**
✓	Bursting Strength	SLS 1234/1	ISO 13938-1
✓	Seam Slippage	-	ISO 13936-1
✓	Seam Strength – Grab Method	SLS 1249/2	ISO 13935-2
✓	Seam Strength – Strip Method	SLS 1249/1	ISO 13935-1
✓	Tearing Strength (Tounge Tearing, etc)	SLS 1251/1	ISO 13937-1
✓	Tensile Strength – Grab Method	SLS 43/2	ISO 13934-2
✓	Tensile Strength – Strip Method	SLS 43/1	ISO 13934-1
✓	Types of Stitches	-	-

\* AATCC - American Association of Textile Chemists and Colorists

\*\* ASTM -American Society for Testing and Materials

#### h) Fabric Handle Tests

Test description		SLS Standard	Equivalent International Standard
✓	Bow & Skewness – Woven & Knitted	SLS 89	ASTM 3882*
✓	Crease Recovery	SLS 200	ISO 2313
✓	Fabric Thickness - Non woven	-	ISO 9073/2
✓	Fabric Thickness - Woven	SLS 696	ISO 5084
✓	Fabric Thickness - Woven	-	ASTM D 1777

\*ASTM -American Society for Testing and Materials

### i) Yarn Tests

Test description		SLS Standard	Equivalent International Standard
✓	Mercerization - Microscope	-	-
✓	No. of Filaments	-	-
✓	No. of Intermingles of Yarn	-	-
✓	Single Yarn Strength	SLS 1429	ISO 2062
✓	Total Yarn Length (Sewing Method)	-	-
✓	Twist in Yarn removed from Fabric	-	ISO 7211/4
✓	Yarn Diameter	-	ASTM D 2255*
✓	Yarn Number (Count)- Short Length Method	-	ASTM D 1059*
✓	Yarn Number (Count)- Skein Method	SLS 20	ISO 2060
✓	Yarn Shrinkage	-	ASTM D 2259*
✓	Yarn Twist	SLS 23	ISO 2061
✓	Yarn Type	-	-

\* ASTM -American Society for Testing and Materials

### j) General Tests

Test description		SLS Standard	Equivalent International Standard
✓	Moisture Content	SLS 17	ISO 6741