SRI LANKA STANDARD 635:1984
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SPECIFICATION FOR
POLYESTER COTTON/RAYON SUITING FABRICS

SRI LANKA STANDARDS INSTITUTION

SPECIFICATION FOR WOVEN POLYESTER COTTON/RAYON SUITING FABRICS

SLS 635:1984

Gr. 5

SRI LANKA STANDARDS INSTITUTION
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Sri Lanka.

SRI LANKA STANDARD

SPECIFICATION FOR WOVEN POLYESTER COTTON/RAYON SUITING FABRICS

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1984-02-22, after the draft, finalized by the Drafting Committee on Synthetic Suitings, had been approved by the Textiles Divisional Committee.

All standard values given in this specification are in SI units.

For the purpose of deciding whether a particular requirement of this specification is complied with, the final vlaue, observed or calculated, expressing the results of a test or analysis, shall be rounded off in accordance with CS 102. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

In the preparation of this standard, valuable assistance derived from related publications of the British Standards Institution, the Indian Standards Institution and the South African Bureau of Standards is gratefully acknowledged.

1 SCOPE

This specification prescribes requirements, methods of sampling and tests for dyed or undyed woven polyester cotton/rayon fabrics, suitable for suitings.

2 REFERENCES

BS 5811 Determination of the resistance to pilling of woven fabrics

SLS 42 Determination of mass per unit length and per unit area of woven or kintted fabrics

CS 43 Determination of breaking load and extension of strips of woven textile fabrics

SLS 45 Woven fabrics - Measurement of length of pieces

SLS 46 Woven fabrics - Measurement of width of pieces

CS 53 Determination of colour fastness of textile materials to washing at 50° C (Test 2)

CS 62 Determination of colour fastness of textile materials to daylight

CS 63 Determination of colour fastness of textile materials to rubbing

CS 67 Determination of colour fastness of textile materials to perspiration

CS 86 Determination of pH value of aqueous extracts of textile materials

CS 89 Determination of bow and skewness in woven fabrics

CS 102 Presentation of numerical values

CS 151 Quantitative chemical analysis of binary mixturers of polyester fibres with cotton or viscose rayon

CS 198 Determination of colour fastness of textile materials to hot pressing

CS 199 Determination of shrinkage on washing of woven rayon synthetic fibre fabrics

CS 200 Determination of recovery of fabrics from creasing

CS 203 Determination of colour fastness of textile materials to organic solvents

SLS 428 Random sampling methods

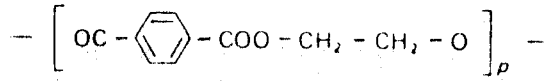
SLS 431 General terms and descriptions of basic weaves

SLS ... Determination of colour fastness of textile materials to light:Xenon arc (under preparation).

3 DEFINITIONS

For the purpose of this specification, the definitions given in SLS 431 and the following terms shall apply:

3.1 polyester fibre: A fibre formed from a linear polyester, comprising at least 85 per cent by mass in the chain of an ester of a dihydric alcohol and terephthalic acid, for example: polyethylene terephthalate, the formula of which is



3.2 rayon: A fibre consisting wholly or mainly of regenerated cellulose.

3.3 cupro: Re-generated cellulose fibre obtained by the cuprammonium process.

3.4 viscose: Re-generated cellulose fibre obtained by the viscose process for filament and discontinuous fibre.

3.5 modal: Re-generated cellulose fibre obtained by processes giving a high tenacity and a high wet modulus. These fibres should be able to resist in the wet state a load of 22.5 g/tex. Under this load elongation in the wet state should not be greater than 15 per cent.

4 REQUIREMENTS

4.1 General

4.1.1 The yarn used in the manufacture of cloth shall be made from polyester, cotton/rayon or polyester cotton or polyester rayon blended fibres.

4.1.2 The cloth shall be of plain weave, twill weave or satin weave.

4.1.3 The selvedges of the cloth shall be of plain or ribbed weave and firm. The selvedges shall have a minimum width of 8 mm.

4.1.4 Dyed cloth shall be evenly dyed to shades as agreed between the buyer and the seller. Finished cloth shall be free from substances that cause tendering.

4.1.5 The cloth shall not contain any major flaws discernible to the eye.

4.2 Composition

The fabric shall be one of the mixtures of polyester fibre and cotton/rayon:

	Polyester fibre	Cotton/rayon
a)	80 per cent	20 per cent
b)	65 per cent	35 per cent
c)	50 per cent	50 per cent

A tolerance of ± 5 per cent on declared composition shall be permitted.

4.3 Mass per unit area (g/m^2)

The material shall have a minimum mass per unit area of 180 g/m^2 when tested by the method prescribed in **SLS 42**. The tolerance on the specified/declared mass shall be $^{+5}_{-2.5}$ per cent.

4.4 Colour fastness

The cloth shall be fast to various agencies listed in Table 1. The colour fastness ratings shall be in accordance with the requirements specified in Table 1 when tested by the corresponding methods.

TABLE 1 - Colour fastness requirements

Fastness (1)	Numerical ratings (2)	Method of test (3)
Daylight	5 or better	CS 62
Washing	4 or better	CS 53
Rubbing - dry and wet	4 or better	CS 63
Perspiration	4 or better	CS 67
Hot pressing - dry and wet	4 or better	CS 198
Organic solvents	3 or better	CS 203

4.5 pH value

The pH value of the aqueous extract of the cloth when tested by the cold method prescribed in CS 86 shall be not less than 6 and not more than 8.

4.6 Dimensional change

Dimensional change of cloth warpway or weftway when tested in accordance with the method prescribed in CS 199 shall be not more than 1.5 per cent.

4.7 Crease recovery

The crease recovery angle of the cloth (dry state) when evaluated by the method prescribed in CS 200 shall be at least 130°.

4.8 Resistance to pilling

The resistance to pilling rating at the end of 5 hours, when tested by the method prescribed in BS 5811 shall be 3 and above.

4.9 Width

4.9.1 The minimum width of fabrics exclusive of selvedge, when measured in accordance with SLS 46 shall be 710 mm for single width cloth and 1420 mm for double width cloth or as mutually agreed between the buyer and the seller.

4.9.2 The width of each piece in the sample under test shall not vary at any place by more than 2 per cent below or 4 per cent above the nominal width.

4.10 Length

The piece length when determined as in SLS 45 shall not be less than the value specified /declared.

4.11 Skewness

The skewness of weft when tested by the method prescribed in CS 89 shall not exceed 6 per cent and the value at any part of the fabric shall not exceed 10 per cent.

4.12 Breaking strength

The material shall have a minimum breaking strength of 600 N (warpway) and 400 N (weftway) when tested by the method prescribed in CS 43.

5 PACKAGING

Fabrics shall be rolled as agreed between the buyer and the seller and covered with a suitable material.

6 MARKING

6.1 The following information shall be marked legibly and indelibly on a label securely attached to the end of each bale:

a) Manufacturer's name, address and/or registered trade mark, if any;

b) Brand name, if any;

c) Composition and type of fabric (for example: 80/20 polyester/cotton*);

d) Colour;

e) Width in millimetres; and

f) Length in metres.

**NOTE - If rayon has been used, designate as to whether "viscose", "cupro" or "modal".*

6.2 The bales may also be marked with the Certification Mark of the

Sri Lanka Standards Institution illustrated below on permission being granted for such marking by the Sri Lanka Standards Institution.

NOTE - The use of the Sri Lanka Standards Institution Certification Mark (SLS Mark) is governed by the provisions of the Sri Lanka Standards Institution Act and the regulations framed thereunder. The SLS mark on products covered by a Sri Lanka Standard is an assurance that these have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control, which is devised and supervised by the Institution and operated by the producer. SLS marked products are also continuously checked by the Institution for conformity to the relevant standards as a further safeguard. Details of conditions under which a permit for the use of the Certification Mark is granted to manufacturers or processors may be obtained from the Sri Lanka Standards Institution.

7 SAMPLING

7.1 Lot

All the bales of cloth, manufactured under same condition of manufacture shall constitute a lot.

7.2 Scale of sampling

7.2.1 The conformity of a lot to the requirements of this specification shall be determined on the basis of tests carried out on the samples selected from the lot.

7.2.2 The number of bales to be selected from the lot shall be according to Column 1 and Column 2 of Table 2.

TABLE 2 - Scale of sampling

No. of bales in the lot (1)	No. of bales to be selected (2)	Sub-sample (3)	Acceptance No. (4)
Up to 50	5	2	0
51 to 150	8	3	0
151 to 300	13	3	1
301 to 500	20	5	1
501 and above	32	5	2

7.2.3 Bales shall be selected at random. In order to ensure randomness of selection, random number tables as given in SLS 428 shall be used.

7.3 Number of tests

7.3.1 Each bale selected as in 7.2.2 shall be examined for marking and packaging requirements. Each bale selected shall be inspected for requirements specified in 4.1. 4.9 and 4.10.

7.3.2 A sub-sample of size as given in Column 3 of Table 2 shall be selected at random. A minimum of 3 test pieces, each of 1 m length, shall be cut from three places selected randomly, from these selected bales.

7.3.2.1 Test pieces selected as in 7.3.2 shall be subjected to the requirements specified in 4.6, 4.7 and 4.11.

7.3.2.2 One test piece selected as in 7.3.2 shall be subjected to the tests specified in 4.2, 4.3, 4.4, 4.5, 4.6 and 4.12.

8 CONFORMITY TO STANDARD

The lot shall be considered as conforming to the requirements of this specification, if the following conditions are satisfied.

8.1 Each bale satisfies the marking and packaging requirements.

8.2 The number of bales not conforming to any one or more requirements specified in 4.1, 4.9 and 4.10 is less than or equal to the corresponding acceptance number given in Column 4 of Table 2.

8.3 Tests carried out on each test piece as in 7.3.2 satisfy the relevant requirements.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI *which includes surveillance inspection of the factory, testing of both factory and market samples.*

Further particulars of the terms and conditions of the permit may be obtained from the Sri *Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.*

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SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

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All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

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