

SRI LANKA STANDARD 456 : 1988

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SPECIFICATION FOR
HANDMADE BATIKS
(FIRST REVISION)

SRI LANKA STANDARDS INSTITUTION

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SLS 456 : 1988

Gr. 6

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This standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD
SPECIFICATION FOR HANDMADE BATIKS
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FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1988-12-12, after the draft, finalized by the Drafting Committee on Handmade Batiks, had been approved by the Textiles Divisional Committee.

This specification was first published in 1979. In this revision the definition of the word "Batik" has been included in order to differentiate batik from printed fabrics. Cross reference has been made to relevant Sri Lanka Standards for Poplin, and cotton sheetings which are used as base fabrics. Greeting cards have also been included as an item of handmade batik. Methods of sampling and conformity to standard have been modified.

The types of base fabrics commonly used for batik manufacture are given in Appendix A as a guidance to the manufacturers. Specific requirements for poplin, sheeting and voile have been indicated in Clause 4.1.3 as these are some of the most widely used fabrics for batik dyeing. Recommended waxes, dyes and the recommended process for batik dyeing have been given in Appendix C and Appendix D respectively.

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 value, observed or calculated, expressing the result of a test or an analysis, shall be rounded off in accordance with CS 102. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this specification.

1 SCOPE

This specification prescribes the requirements and methods of sampling and test for handmade batiks.

2 REFERENCES

- CS 55 Determination of colour fastness of textile materials to washing at 95 °C for 30 minutes (Test 4).
- 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.
- SLS 90 Cotton poplin (Powerloom) (First revision).
- CS 102 Presentation of numerical values.
- SLS 335 Code for care labelling of textiles.
- SLS 428 Random sampling methods.
- SLS 698 Cotton bed sheets and sheetings (Powerloom).

3 DEFINITIONS

For the purpose of this specification the following definitions shall apply :

- 3.1 batik** : A method of resist dyeing where the material is prevented from getting coloured by the presence of a resisting agent such as wax in pre-selected areas of a design. When the colour is set in the unresisted areas, the material is boiled to remove the wax. By repeating this process of waxing, dyeing and wax removal, a multicolour design is produced using dyestuffs applicable under cold conditions.
- 3.2 bees wax** : A white or yellow plastic substance obtained from honey comb of the bee, melting point 63 °C to 65 °C.
- 3.3 djanting** : A small cup of thin copper sheet which carries a tubular spout at one end and fitted into a short bamboo rod at the other by means of a rolled extension of the copper sheet which forms a fang. The diameter of the spout is varied in accordance with the width of the line it is desired to trace.
- 3.4 paraffin wax** : A higher homologue of paraffins obtained as a residue from the distillation of petroleum. Melting point 45 °C to 65 °C, relative density 0.9.
- 3.5 tjap** : Specially made block composed of copper strips band worked and fitted into a copper lattice and held in place by solder. Printing on both sides is possible using this equipment and a higher degree of precision even intricate designs may be obtained.

4 REQUIREMENTS

4.1 Base fabric

4.1.1 The base fabric used shall be cotton or silk material. Cotton fabrics such as poplin, sheeting, voile are suitable for use as base fabric. Base fabrics commonly used and suitable for different products are given in Appendix A.

4.1.2 The base fabric when examined visually shall be reasonably free from defects. The base fabric shall be free from natural impurities, size, finishing agents and optical brightening agents.

4.1.3 Cotton poplin, sheeting or voile used shall conform to the requirements given in relevant Sri Lanka Standards and Appendix B.

- a) Cotton poplin, conforming to SLS 90
- b) Cotton sheeting, conforming to SLS 698
- c) Voile, conforming to Appendix B

4.2 Finished product

4.2.1 Colour fastness

The fabric shall be fast to daylight, washing, perspiration and rubbing. The colour fastness ratings of the fabric shall be in accordance with the requirements of Table 1, when tested by the relevant methods.

TABLE 1 - Requirements for colour fastness

Sl. No. (1)	Product (2)	Numerical ratings			
		Daylight (3)	Washing (4)	Perspiration (5)	Rubbing (6)
i)	Bed spreads	4 or better	4 or better	4 or better	*
ii)	Cushion covers	4 or better	5	4 or better	5
iii)	Dresses and dress lengths	5 or better	4 or better	4 or better	4 or better
iv)	Furnishing	5 or better	4 or better	4 or better	4 or better
v)	Greeting cards	4 or better	*	*	*
vi)	Handkerchiefs	4 or better	5	5	4 or better
vii)	Sarees and saree materials	5 or better	4 or better	4 or better	4 or better
viii)	Scarves	5 or better	4 or better	4 or better	4 or better
ix)	Shirts and shirtings	5 or better	4 or better	4 or better	4 or better
x)	Table cloths	4 or better	5	4 or better	4 or better
xi)	Ties	5 or better	4 or better	4 or better	4 or better
xii)	Wall-hangings	4 or better	*	*	*
	Method of test	CS 62	CS 55	CS 67	CS 63

* not applicable.

5 PACKAGING

The fabric shall be rolled or folded in single pieces or in bales as agreed to between the buyer and the seller.

5.1 Single pieces

The fabric shall be completely wrapped in polyethylene, cellophane or any other suitable material. The wrapper shall not contain any colourant capable of staining the fabric on wetting and/or rubbing.

5.2 Bales

The pieces having the required length shall be completely wrapped in a suitable material. The wrapper shall not contain any colourant capable of staining the fabric on wetting and/or rubbing. Only pieces of the same variety and finish shall be packed together in the same bale.

5.3 Apparels

5.3.1 Each apparel shall be completely wrapped in polyethylene, cellophane or any other suitable material as agreed to between the buyer and the seller. The wrapper shall not contain any colourant capable of staining the apparel on wetting and/or rubbing.

5.3.2 A number of such packages as agreed to between the buyer and seller may in turn be packed in a carton.

6 MARKING

6.1 Single pieces

The following information shall be marked or labelled legibly and indelibly at the end of each piece :

- a) The words "Handmade batiks";
- b) Name and address of the manufacturer and/or distributor (including country of origin);
- c) Type of fibre (base fabric);
- d) Length, in metres;
- e) Width, in centimetres;
- f) Care instructions as given in SLS 335;
- g) Registered trade mark, if any;
- h) Brand name, if any; and
- j) Batch or code number.

6.2 Bales

The following information shall be marked or labelled legibly and indelibly on each bale :

- a) The words "Handmade Batiks";
- b) Name and address of the manufacturer and/or distributor (including country of origin);
- c) Type of fibre (base fabric);
- d) Number of pieces;
- e) Total length of pieces, in metres;
- f) Width, in centimetres;
- g) Registered trade mark, if any;
- h) Brand name, if any; and
- j) Batch or code number.

6.3 Apparels

6.3.1 Packages

The following information shall be marked or labelled legibly and indelibly on each apparel package :

- a) Name of the product with the words "Handmade Batiks";
- b) Name and address of the manufacturer and/or distributor (including country of origin);
- c) Type of fibre (base fabric);
- d) Size, in centimetres, as relevant to the product;
- e) Care instructions as given in SLS 335.
- f) Registered trade mark, if any; and
- g) Brand name, if any;

6.3.2 Cartons

The following information shall be marked or labelled legibly and indelibly on each carton :

- a) Name of the product with the words "Handmade Batik";
- b) Name and address of the manufacturer and/or distributor (including country or origin);
- c) Type of fibre (base fabric);
- d) Size, in metric units, as relevant to the product;
- e) Number of units; and
- f) Batch or code number.

7 SAMPLING

7.1 Lot

In any consignment, all the items of the same product, and belonging to one batch of manufacture of supply shall constitute a lot.

7.2 Scale of sampling

7.2.1 Samples shall be tested from each lot for ascertaining its conformity to the requirements of this specification.

7.2.2 The number of items to be selected from a lot shall be in accordance with the table 2.

TABLE 2 - Scale of sampling

No. of items in the lot (1)	No. of items to be selected (2)
Up to 15	1
16 to 25	2
26 to 50	3
51 to 100	4
101 to 300	6
301 and above	8

7.2.3 The items 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 item selected as in 7.2.2 shall be inspected for packaging (5) and marking requirements (6).

7.3.2 Each item selected as in 7.2.2 shall be tested for the requirements given in 4.2.1.

8 METHODS OF TESTS

Tests for requirements laid down in 4.2.1 shall be carried out by the methods prescribed therein.

9 CRITERIA FOR CONFORMITY

A lot shall be declared as conforming to the requirements of this specification if the following conditions are satisfied.

9.1 Each item inspected as in 7.3.1 satisfies the relevant requirements.

9.2 Each item tested as in 7.3.2 satisfies the relevant requirements.

APPENDIX A

BASE FABRICS COMMONLY USED FOR SOME PRODUCTS

<u>Product</u>	<u>Base fabric</u>
Bed spreads	Cotton (Poplin, sheeting)
Cushion covers	Cotton (Poplin, sheeting)
Dresses and dress lengths	Silk, Cotton (Poplin, voile)
Greeting cards	Silk, Cotton (Poplin, voile)
Handkerchiefs	Cotton (Poplin, voile)
Sarees and saree materials	Silk, Cotton (Poplin, voile)
Scarves	Silk, Cotton (Poplin, voile)
Shirts and shirtings	Silk, Cotton (Poplin, voile)
Table cloths	Cotton (Poplin, sheeting)
Ties	Silk, Cotton (Poplin)
Wall hangings	Silk, Cotton

NOTES

1. Any cellulosic material or blend of cellulose and silk may also be used as the base fabric for some of these products.
2. A close weave fabric takes, in fine details in design.

APPENDIX B REQUIREMENTS FOR VOILE

Sl. No. (1)	Characteristic (2)	Requirement (3)
i)	Constructional details	
	a) Count of yarn in tex	
	warp	10
	weft, combed	10
	b) Threads per 10 mm	
	warp	25 to 28
	weft	9 to 11
ii)	Scouring loss, per cent, max	2
iii)	Shrinkage, per cent, max	
	warp	1.6
	weft	3
iv)	pH value (aqueous extract)	6.0 to 8.5

APPENDIX C
RECOMMENDED WAXES AND DYES

C.1 WAX

C.1.1 A mixture of waxes is recommended for covering the fabric prior to dyeing.

C.1.2 If "crackled" effect is desired a mixture of paraffin wax and bees wax is recommended. The higher the paraffin wax content, the more brittle the print and more pronounced the "crackling". If no "crackled" effect is desired use pure bees wax. Over heating of the wax should be avoided. A temperature of approximately 77 °C to 95 °C is recommended.

C.2 DYES

The following types of cold water dyes are recommended :

- a) Indigo and other cold dyeing vat dye stuffs;
- b) Azoic dye stuffs; and
- c) Reactive cold water dye stuffs and any other suitable cold dye may be used.

APPENDIX D
RECOMMENDED PROCESS FOR BATIK DYEING

D.1 PREPARATION OF THE FABRIC

Prepare the bleached fabric by boiling or washing with detergent and water to remove all fillers and finishing materials which may interfere with dyeing. Treat with a thin starch solution and iron to prevent undue penetration of wax into the fabric when using the tjap process.

D.2 OUTLINE OF THE DESIGN

Outline the design using a suitable pencil or charcoal.

D.3 WAXING

D.3.1 Application of wax resist

Apply wax on both sides of the fabric and allow to penetrate the fabric. This will, make the edges of designs appear sharper in the final result. A brush, a funnel, or a djaning may be used for applying wax.

NOTE

In the case of the tjap process wax should be applied on one side of the fabric only.

D.3.2 Hardening of wax

Allow the wax to harden on the fabric.

NOTE

Drying in the sun is not recommended as wax may melt.

D.4 DYEING

All dye stuffs shall be used according to manufacturers recommendations for dyeing. Material shall be dyed in dye baths of suitable size by immersing the waxed fabric in the bath for the specified interval of time. Patches and flaws should not be visible in the dyed fabric.

D.5 REMOVAL OF RESIDUAL WAX

Boil the dyed fabric in water and recover the wax as much as possible. This process removes the surface hold wax. Treat in a hot solution of soda ash, soap or any suitable chemical in several baths for about 15 minutes to remove the residual wax. Residual wax on the fabric should not exceed 0.5 per cent by mass.

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.



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.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

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.