भारतीय मानक Indian Standard

> वस्त्रादि — हथकरघा सूती केलिको, विरंजित या रंगीन — विशिष्टि

> > (दूसरा पुनरीक्षण)

Textiles — Handloom Cotton Calico, Bleached or Dyed — Specification

(Second Revision)

ICS 59.080.30

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भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002 MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI - 110002 www.bis.gov.in www.standardsbis.in

November 2024

Price Group 5

Handloom and Khadi Sectional Committee, TXD 08

FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textiles Division Council.

Handloom cotton calico is a type of fabric that holds cultural significance and woven using traditional handloom techniques. Handloom cotton calico is lightweight and breathable, making it ideal for warm weather garments such as dresses, blouses, and skirts. Its softness adds comfort to the wearer, allowing for easy movement throughout the day. Handloom cotton calico represents a blend of tradition, craftsmanship, and practicality, making it a cherished fabric in various cultural contexts.

This standard was first published in 1958 and subsequently revised in 1987. The standard has again been revised to incorporate the following changes:

- a) Test method for identification of material has been incorporated;
- b) Method of test for count of yarn along with its tolerance has been specified;
- c) Marking clause has been modified;
- d) *p*H value of aqueous extract has been incorporated; and
- e) References to standards have been updated.

The composition of the Committee responsible for the formulation of this standard is given in <u>Annex B</u>.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES — HANDLOOM COTTON CALICO, BLEACHED OR DYED — SPECIFICATION

(Second Revision)

1 SCOPE

1.1 This standard prescribes constructional particulars and other requirements of handloom cotton calico, bleached or dyed.

1.2 This standard does not specify the type of finish, general appearance, lustre and feel of cloth nor does it specify the degree of whiteness of bleached cloth or the colour of dyed cloth.

2 REFERENCES

The standards listed in <u>Annex A</u> contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

3 MANUFACTURE

3.1 Yarn

The cotton yarn used in the manufacture of calico cloth shall conform to IS 171.

3.2 Cloth

The cloth shall be free from substances liable to cause subsequent tendering.

4 REQUIREMENTS

4.1 The constructional particulars of calico cloth shall conform to those given in <u>Table 1</u>.

4.2 The calico cloth shall also conform to the requirements given in <u>Table 2</u>.

4.3 If in order to illustrate or specify the indeterminable characteristics such as general appearance, lustre, feel, and shade of the cloth, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

4.3.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

5 INSPECTION

5.1 The cloth when visually inspected, should be reasonably free from the following defects:

- a) Weft crack or more than two missing picks across the width;
- b) Prominently noticeable weft bar due to the difference in raw material, count, twist, lustre, colour, shade, etc;
- More than two adjacent ends running parallel, broken or missing and extending beyond 15 cm;
- d) Prominent selvedge defects;
- e) Noticeable warp or weft float;
- f) Noticeable oil or other stains;
- g) Noticeable hole, cut or tear up to 3 mm in size;
- h) Smash rupturing the texture of the fabric; and
- j) Prominently noticeable dyeing defects (bars, streaks and patches, etc).

5.1.1 A reference may be made to IS 14466 for details of these defects.

6 SAMPLING

6.1 The scale of sampling and criteria for conformity as given in IS 3919 shall be followed in respect of physical characteristics, namely, number of threads per decimetre, weight and dimension.

6.2 The scale of sampling and criteria for conformity as given in IS 5463 shall be followed in respect of chemical characteristics of colour fastness, dimensional changes, fibre identification and scouring loss.

Sl No.		Characteristics	Requirement	Method of Test, Ref to
(1)		(2)	(3)	(4)
i)	Count of	of yarn (for guidance only) tex		IS 3442
	(cotton	count):		
	a)	Warp	23 tex (or 26s)	
		Tolerance	± 5 percent	
	b)	Weft	23 tex (or 26s)	
		Tolerance	± 5 percent	
ii)	Number	r of threads, per dm:		IS 1963
	a)	Ends	270	
		Tolerance	\pm 5 percent	
	b)	Picks	120	
		Tolerance	± 5 percent	
iii)	Weight	of fabric, g/m ²	120	IS 1964
	Toleran	ice	± 5 percent	
iv)	Dimens	ion:		IS 1954
	a)	Length, m	As declared	
		Tolerance	(see Note)	
	b)	Width, m	90 or as declared	
		Tolerance	- 2 percent	
v)	Weave		Plain	Visual
NOTE —	The length s	hall not be less than the declared length.		

Table 1 Constructional Particulars of Handloom Cotton Calico Cloth, Bleached or Dyed

(Clause 4.1)

7 MARKING

7.1 The cloth shall be suitably marked or labelled with the following information:

- a) Name of the material;
- b) Manufacturer's name, initials or trademark;
- c) Month and year of manufacture;
- d) Length and width of piece;
- e) Indication of the source of manufacture; and
- f) Other declarations required as per law in force.

7.2 BIS Certification Marking

The product conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the product may be marked with the Standard Mark.

8 PACKING

Unless otherwise agreed upon by the buyer and the seller, the cloth shall preferably be packed in bales or cases in conformity with the procedure laid down in IS 1347 or IS 293.

Sl No.	Characteristics	Requirement	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Colour fastness rating to (for dyed cl only):	loth	
	a) Light	5 or better	IS/ISO 105-B01 or IS/ISO 105-B02
	b) Washing Test 4:		IS/ISO 105-C10
	 Change in colour Staining in cotton 	4 or better 4 or better	
	c) Bleaching:		IS/ISO 105-N01
	 Change in colour Staining in cotton 	4 or better 4 or better	
	d) Perspiration:		IS/ISO 105-E04
	 Change in colour Staining in cotton 	4 or better 4 or better	
ii)	Dimensional change, percent, Max	4	IS 2977
iii)	Scouring loss, percent, Max	2.5	IS 1383
iv)	<i>p</i> H value of aqueous extract	6.0 to 8.5	IS 1390
v)	Fibre identification	100 percent cotton	IS 667

Table 2 Requirements of Handloom Cotton Calico Cloth, Bleached or Dyed

(*Clause* <u>4.2</u>)

ANNEX A

(Clause $\underline{2}$)

LIST OF RFERRED STANDARDS

IS No.	Title	IS No.	Title
IS/ISO 105-B01 : 2014	Textiles — Tests for colour fastness: Part B01 Colour fastness to light: Daylight	IS 1390 : 2022/ ISO 3071 : 2020	Textiles — Determination of <i>p</i> H of aqueous extract (<i>third revision</i>)
IS/ISO 105-B02 : 2014	Textiles — Tests for colour fastness: Part B02 Colour fastness to artificial light:	IS 1954 : 2024/ ISO 22198 : 2006	Textiles — Fabrics — Determination of width and length (<i>third revision</i>)
IS/ISO 105-C10 : 2006	Xenon arc fading lamp test Textiles — Tests for colour fastness: Part C10 Colour fastness to washing with	IS 1963 : 1981	Methods for determination of threads per unit length in woven fabrics (<i>second</i> <i>revision</i>)
IS/ISO 105-N01 : 1993	soap or soap and soda Textiles — Tests for colour fastness: Part N01 Colour fastness to bleaching: Hypochlorite	IS 1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics (<i>second</i> <i>revision</i>)
IS/ISO 105-E04 : 2013	Textiles — Tests for colour fastness: Part E04 Colour fastness to perspiration	IS 2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on
IS 171 : 1993	Textiles — Ring spun grey cotton yarn for weaving — Specification (fourth revision)	IS 3442 : 2023	soaking in water (first revision) Textiles — Method for datermination of arisen and
IS 293 : 1980	Code for seaworthy packaging of cotton yarn and cloth (<i>third revision</i>)		determination of crimp and linear density of yarn removed from fabric (<i>second revision</i>)
IS 667 : 1981	Methods for identification of textile fibres (<i>first</i> <i>revision</i>)	IS 3919 : 1966	Methods for sampling cotton fabrics for determination of physical characteristics
IS 1347 : 1972	Specification for inland packaging of cotton cloth and yarn (<i>first revision</i>)	IS 5463 : 2022	Methods for sampling of cotton fabrics for chemical tests (<i>first revision</i>)
IS 1383 : 2023	Methods for determination of scouring loss in grey and finished cotton textile materials (<i>second revision</i>)	IS 14466 : 1997/ ISO 8498 : 1990	Fabrics — Description of defects — Vocabulary

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ANNEX B

(<u>Foreword</u>)

COMMITTEE COMPOSITION

Handloom and Khadi Sectional Committee, TXD 08

Organization	Representative(s)
Weavers Service Centre, Delhi	SHRI VISHESH NAUTIYAL (<i>Chairperson</i>) Shri Vikas Kumar (<i>Alternate</i>)
Center of Excellence for Khadi (COEK)-NIFT, New Delhi	Representative
Central Pollution Control Board, New Delhi	SHRI P. K. MISHRA SHRI RISHABH SRIVASTAV (<i>Alternate</i>)
CRPF, New Delhi	SHRI D. P. UPADHYAY Shri Sanjeev Kumar Singh (<i>Alternate</i>)
Department of Handlooms & Textiles, Chennai	SHRI THIRU R. RAGHUNATH SHRI THIRU K. MUNUSAMY (<i>Alternate</i>)
Fabindia, New Delhi	Representative
Flag Foundation of India, New Delhi	Shri Ashim Kohli
Gandhigram Rural Institute, Dindigul	DR B. SENTHIL KUMAR
Haryana Khadi Gramodyog Sangh, Karnal	SHRI PAWAN GARG SHRI R. S. YADAV (<i>Alternate</i>)
ICAR – Central Institute for Research on Cotton Technology, Mumbai (CIRCOT)	DR SUJATA SAXENA DR A. S. M. RAJA (<i>Alternate</i>)
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Indian Institute of Handloom Technology, Salem	DR P. THENNARASU
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Karnatka Khadi Gramodyog Samyuktha Sangha, Hubli	SHRI K. V. PATTAR Shri Shivananda S. Mathapati (<i>Alternate</i>)
Khadi and Village Industries Commission, Mumbai	SHRI VIJAYSRIDHAR DR SENTIL KUMAR C. B. (<i>Alternate</i>)
Khadi Dyers & Printers, Mumbai	SHRI D. N. BHATT SHRI V. D. JOSHI (<i>Alternate</i>)

Organization

Khadi Gramodyog Mandal, Rampur

Kshetriya Khadi Gramodyog Samiti, Dausa

Madhya Bharat Khadi Sangh, Gwalior

Mahatma Gandhi Institute for Rural Industrialization, Wardha

Metpalli Khadi Gramodyog Pratisthan, Metpalli

Ministries of Defence (DGQA), New Delhi

Ministries of Health, New Delhi

National Handloom Development Corporation Ltd, Gautam Budh Nagar

Northern India Textile Research Association, Ghaziabad

Northern Railways, New Delhi

Office of the Development Commissioner for Handlooms, New Delhi

Orient Processes Pvt Ltd, Guwahati

Rastriya Khadi Gramodyog Federation, Moradabad

Swastik Gramodyog Samiti, Delhi

The Cotton Textiles Export Promotion Council (TEXPROCIL), Mumbai

The Handloom Export Promotion Council, Chennai

The Tamil Nadu Handloom Weavers Cooperative Society Ltd, Chennai

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Amendments Issued Since Publication

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