भारतीय मानक Indian Standard

वस्त्रादि — हथकरघा सूती केलिको, विरंजित या रंगीन — विशिष्टि

IS 1241: 2024

(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

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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) pH 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 Annex B.

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 Annex A 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 $\underline{\text{Table 2}}$.
- **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:
 - 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;
 - c) 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.

Table 1 Constructional Particulars of Handloom Cotton Calico Cloth, Bleached or Dyed
(Clause 4.1)

| Sl No. | | Characteristics | Requirement | Method of Test, Ref to |
|--------|----------------------------|---|-------------------|------------------------|
| (1) | | (2) | (3) | (4) |
| i) | Count of (cotton | of yarn (for guidance only) tex count): | | IS 3442 |
| | a) | Warp | 23 tex (or 26s) | |
| | ŕ | Tolerance | ± 5 percent | |
| | b) | Weft | 23 tex (or 26s) | |
| | | Tolerance | ± 5 percent | |
| ii) | Number of threads, per dm: | | | IS 1963 |
| | a) | Ends | 270 | |
| | | Tolerance | ± 5 percent | |
| | b) | Picks | 120 | |
| | | Tolerance | ± 5 percent | |
| iii) | Weight | of fabric, g/m ² | 120 | IS 1964 |
| | Toleran | ce | ± 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 |

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;
 - 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.

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

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

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

ANNEX A

(*Clause* <u>2</u>)

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>pH</i> 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 (third revision) |
| 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 (second revision) |
| 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 (second revision) |
| 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 determination of crimp and |
| IS 293:1980 | Code for seaworthy packaging of cotton yarn and cloth (third revision) | | linear density of yarn removed from fabric (second revision) |
| IS 667 : 1981 | Methods for identification of textile fibres (first revision) | 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 (first revision) | IS 5463 : 2022 | Methods for sampling of cotton fabrics for chemical tests (first revision) |
| IS 1383 : 2023 | Methods for determination of scouring loss in grey and finished cotton textile materials (second revision) | IS 14466: 1997/ ISO 8498: 1990 | Fabrics — Description of defects — Vocabulary |

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Handloom and Khadi Sectional Committee, TXD 08

Organization Representative(s)

Weavers Service Centre, Delhi Shri Vishesh Nautiyal (*Chairperson*)

SHRI VIKAS KUMAR (Alternate)

Central Pollution Control Board, New Delhi SHRI P. K. MISHRA

Center of Excellence for Khadi (COEK)-NIFT, New Delhi

SHRI RISHABH SRIVASTAV (Alternate)

CRPF, New Delhi Shri D. P. Upadhyay

SHRI SANJEEV KUMAR SINGH (Alternate)

Department of Handlooms & Textiles, Chennai Shri Thiru R. RAGHUNATH

SHRI THIRU K. MUNUSAMY (Alternate)

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 (Alternate)

ICAR – Central Institute for Research on Cotton

Technology, Mumbai (CIRCOT)

DR SUJATA SAXENA

REPRESENTATIVE

DR A.S.M. RAJA (Alternate)

Indian Institute of Handloom Technology, Jodhpur DR J. SIVAGNANAM

Indian Institute of Handloom Technology, Salem DR P. THENNARASU

Indian Institute of Handloom Technology, Varanasi DR AMIN HIRENBHAI NAVINBHAI

SHRI JITENDER TAK (Alternate)

Indian Institute of Technology, Delhi DR BIPIN KUMAR

DR WAZED ALI (Alternate)

Indo Tibetan Border Police, New Delhi Shri Uttam Kumar

SHRI ANAND KUMAR (Alternate)

Jan Sewa Ashram, Aligarh Shri R. K. Sharma

SHRI AKHILESH KUMAR AWASTHI (Alternate)

Karnatka Khadi Gramodyog Samyuktha Sangha, Hubli SHRI K. V. PATTAR

SHRI SHIVANANDA S. MATHAPATI (Alternate)

Khadi and Village Industries Commission, Mumbai Shri Vijaysridhar

DR SENTIL KUMAR C. B. (Alternate)

Khadi Dyers & Printers, Mumbai SHRI D. N. BHATT

SHRI V. D. JOSHI (*Alternate*)

Organization

Representative(s)

Khadi Gramodyog Mandal, Rampur Shri RAKESH CHAUDHARY

SHRI PRINCE CHAUDHARY (Alternate)

Kshetriya Khadi Gramodyog Samiti, Dausa Shri R. K. Singh

Madhya Bharat Khadi Sangh, Gwalior Shrimati Neelu Mekle

SHRI HARISH MEKLE (Alternate)

Mahatma Gandhi Institute for Rural Industrialization,

Wardha

SHRI MAHESH KUMAR

DR TAPAN RANJAN KAR (Alternate)

Metpalli Khadi Gramodyog Pratisthan, Metpalli Shri G. Madhav

Ministries of Defence (DGQA), New Delhi Shri Arvind Compathane

SHRI N. SENTHIL KUMAR (Alternate)

Ministries of Health, New Delhi REPRESENTATIVE

National Handloom Development Corporation Ltd,

Gautam Budh Nagar

DR SAKTHIVEL PERUMAL SAMY

SHRI JITENDRA TOLAMBIYA (Alternate)

Northern India Textile Research Association, Ghaziabad DR M. S. PARMAR

SHRI SANJEEV SHUKLA (Alternate)

Northern Railways, New Delhi Shri Sanjeev Kumar Jain

SHRI RAJESH KUMAR (Alternate)

Office of the Development Commissioner for Handlooms,

New Delhi

SHRI SIDDHARTH SINGH

SHRI VINAY KUMAR (Alternate)

Orient Processes Pvt Ltd, Guwahati Shri Robin Chandra Goswami

SHRI RAJ BURAGOHAIN (Alternate)

Rastriya Khadi Gramodyog Federation, Moradabad Shri Anil Kumar Singh

SHRI KULDEEP SINGH (Alternate)

Swastik Gramodyog Samiti, Delhi SHRI M. L. PATHAK

SHRI ABHISHEK DIXIT (*Alternate*)

The Cotton Textiles Export Promotion Council

(TEXPROCIL), Mumbai

DR SIDDHARTHA RAJAGOPAL

SHRI RAJESH SATAM (Alternate)

The Handloom Export Promotion Council, Chennai DR M. SUNDAR

SHRI N. SREEDHAR (Alternate)

The Tamil Nadu Handloom Weavers Cooperative

Society Ltd, Chennai

SHRI T. N. VENKATESH

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HEAD (TEXTILES) [REPRESENTING DIRECTOR

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Amendments Issued Since Publication

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BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402 *Website*: www.bis.gov.in

| • | |
|---|--|
| Regional Offices: | Telephones |
| Central : 601/A, Konnectus Tower -1, 6 th Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002 | Telephones { 2323 7617 |
| Eastern : 8 th Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091 | { 2367 0012 2320 9474 { 265 9930 |
| Northern: Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019 | { 265 9930 |
| Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113 | 2254 1442 2254 1216 |
| Western: Manakalya, 5 th Floor/MTNL CETTM, Technology Street, Hiranandani Gardens, Powai Mumbai 400076 | 25700030 25702715 |

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