***भारतीय मानक***

***Indian Standard***

**IS 1937 : 2024**

***वस्त्रादि — हथकरघा सूती ब्लीडिंग मद्रास — विशिष्टि***

*( दूसरा* पुनरीक्षण )

**Textiles — Handloom Cotton Bleeding Madras — 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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**October 2024 Price Group X**

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 Bleeding Madras is a special type of fabric made using traditional methods in the Madras region of India, now called Chennai. The term bleeding refers to how the colors of the fabric slightly fade or blend when washed, giving it a charming appearance.

This fabric is usually crafted from light cotton and is famous for its colorful striped or checked designs. It feels soft and airy, perfect for making various clothing items like shirts, dresses, scarves, and sarees.

This standard was first published in 1961 and subsequently revised in 1987. The standard has again been revised to incorporate the following changes:

1. Marking clause has been modified;
2. References to standards have been updated;
3. Method of test for count of yarn along with its tolerance has been specified;
4. Sampling clause has been modified; and
5. Test method for identification of material has been incorporated.

The composition of the Committee responsible for the formulation of this standard is given in Annex C.

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 BLEEDING MADRAS — SPECIFICATION

*( Second Revision )*

**1 SCOPE**

**1.1** This standard prescribes the constructional particulars and other requirements of handloom cotton bleeding Madras.

**1.2** This standard does not specify the type of finish, general appearance, lustre and feel of cloth, nor does it specify the colour or colour combination in striped or checked 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 handloom cotton bleeding Madras shall conform to the requirements of 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 bleeding Madras shall conform to those given in Table 1.

**Table 1 Constructional Particulars of Handloom Cotton Bleeding Madras**

(*Clause* 4.1)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl No.** | **Variety** | **Count of Yarn for Guidance Only** | | **Ends/**dm | **Picks/**dm | **Mass**  g/m2 | **Length**  m | **Width**  cm | **Weave** |
| Warp Cotton Count (tex) | Weft Cotton Count (tex) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| i) | Loomstate | 60s(9.5) | 40s(14.8) | 330 | 330 | 90 | 20 or 40 or as agreed | 107 or 115 or as agreed | Plain |
| ii) | Washed | 60s(9.5) | 40s(14.8) | 340 | 340 | 85 | 104 or 112 or as agreed |
| Tolerance, Percent | — | ± 5 | ± 5 | ± 5 | | | — | ˗ 2 | — |
| Method of Test, Ref to | — | IS 3442 | | IS 1963 | | IS 1964 | IS 1954 | | Visual |
| NOTE — The length shall not be less than the declared or marked value. | | | | | | | | | |

**4.2** The other requirements of the cloth shall conform to those given in Table 2.

**Table 2 Requirements of Handloom Cotton Bleeding Madras**

(*Clause* 4.2)

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl No.** | **Characteristic** | **Requirement** | **Method of Test, Ref to** |
| (1) | (2) | (3) | (4) |
| i) | Colour fastness to light | 4 or better | IS/ISO 105-B01  or  IS/ISO 105-B02 |
| ii) | Scouring loss, percent, *Max*  a) Loomstate  b) Washed | 8  2.5 | IS 1383 |
| iii) | Dimensional change, percent, *Max*:  a) Loomstate  1) Warp way  2) Weft way  b) Washed  1) Warp way  2) Weft way | 5  2  2.5  1 | IS 2977 |
| iv) | Fiber identification | 100 percent cotton | IS 667 |

**4.3** The colour of the cloth shall bleed when tested by the method prescribed in Annex B.

**4.4** If, in order to illustrate or specify the type of finish, general appearance, lustre and feel, and colour or the colour combination in the striped or checked cloth, a sample has-been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

**4.4.1** 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, shall be reasonably free from following defects:

1. More than two adjacent ends running parallel, broken or missing beyond 20 cm;
2. Weft crack or more than two missing picks across the width of the material;
3. Prominently noticeable weft bar due to the difference in raw material, count, twist, lustre, etc;
4. Noticeable selvedge defects;
5. Noticeable warp or weft floats in the body;
6. Noticeable oil and other stains;
7. Noticeable hole, cut or tear up to 3 mm size;
8. Smash rupturing the texture of the fabric;

j) Undressed snarls noticeable throughout the piece;

k) Conspicuous gout due to foreign matter, usually lint or waste woven;

m) Conspicuous broken pattern;

n) Prominently noticeable dyeing defects; and

p) Any other flaw which mar the appearance or affect the serviceability and/or durability of cloth.

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

**6 SAMPLING**

**6.1** The quantity of handloom cotton bleeding madras of the same variety delivered to a buyer against a despatch not shall constitute a lot.

**6.2** To ascertain the conformity of the lot to the requirements of this standard, samples shall be drawn and inspected from each lot separately.

**6.3** The number of pieces to be selected at random for inspection shall be in accordance with Table 3.

**Table 3 Sample Size and Permissible Number of Non-Conforming Pieces**

(*Clause* 6.3)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl No.** | **Lot Size** | **Sample Size** | **Permissible No. of Non-conforming Pieces** | **Sub Sample Size** |
| (1) | (2) | (3) | (4) | (5) |
| i) | Up to 90 | 5 | 0 | 3 |
| ii) | 91 to 150 | 8 | 0 | 3 |
| iii) | 151 to 500 | 13 | 1 | 5 |
| iv) | 501 to 1 200 | 20 | 1 | 5 |
| v) | 1 201 to 10 000 | 32 | 2 | 8 |
| vi) | 10 001 to 35 000 | 50 | 3 | 8 |
| vii) | 35 001 to 500 000 | 80 | 5 | 13 |
| viii) | 500 001 and above | 125 | 7 | 13 |

**6.4 Number of Tests and Criterion for Conformity**

|  |  |  |  |
| --- | --- | --- | --- |
| *Sl No.* | *Characteristic*(*s*) | *No. of Tests* | *Criterion for Conformity* |
| (1) | (2) | (3) | (4) |
| i) | Count of yarn, length, width, ends, picks, mass and weave | According to co1 (3) of  Table 3 | Permissible number of non-conforming piece does not exceed the corresponding number given in co1 (4) of Table 3 |
| ii) | Colour fastness, dimensional changes, scouring loss, and fibre identification | According to co1 (5) of  Table 3 | All the test specimens meet the relevant requirements |

**7 MARKING**

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

1. Name of the material;
2. Manufacturer's name, initials or trade-mark;
3. Length and width;
4. Count of warp and weft yarn;
5. Indication of the source of manufacture; and
6. Other declarations required as per law in force.

**7.2 BIS Certification Marking**

The product(s) 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 be packed in bales or cases in conformity with the procedure laid down in IS 1347 or IS 293.

**ANNEX A**

(*Clause* 2)

**LIST OF REFFERED STANDARDS**

|  |  |
| --- | --- |
| *IS No.* | *Title* |
| IS/ISO 105-B01 : 2014 | Textiles — Tests for colour fastness: Part B01 Colour fastness to light: Daylight |
| IS/ISO 105-B02 : 2014 | Textiles — Tests for colour fastness: Part B02 Colour fastness to artificial light: Xenon arc fading lamp test |
| IS 171 : 1993 | Textiles — Ring spun grey cotton yarn for weaving — Specification (*fourth revision*) |
| IS 293 : 1980 | Code for seaworthy packaging of cotton yarn and cloth (*third revision*) |
| IS 667 : 1981 | Methods for identification of textile fibres (*first revision*) |
| IS 1347 : 1972 | Specification for inland packaging of cotton cloth and yarn (*first revision*) |
| IS 1383 : 2023 | Methods for determination of scouring loss in grey and finished cotton textile materials (*second revision*) |
| IS 1954 : 2024/  ISO 22198 : 2006 | Textiles — Fabrics — Determination of width and length (*third* *revision*) |
| IS 1963 : 1981 | Methods for determination of threads per unit length in woven fabrics (*second revision*) |
| IS 1964 : 2001 | Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics (*second revision*) |
| IS 2977 : 1989 | Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water (*first revision*) |
| IS 3442 : 2023 | Textiles method for determination of crimp and linear density of yarn removed from fabric |
| IS 14466 : 1997/  ISO 8498 : 1990 | Fabrics — Description of defects — Vocabulary |

**ANNEX B**

(*Clause* 4.3)

**METHOD OF TEST FOR BLEEDING**

**B-1TEST SPECIMENS**

**B-1.1** Cut from the sample under test two test specimens each measuring approximately 10 cm × 10 cm. Keep one of the test specimens as the control sample.

**B-2 PROCEDURE**

**B-2.1** Immerse one test specimen in a mild soap solution (2 g/l), the liquor to specimen ratio being 50 : 1. Maintain the temperature of the soap solution at about 40 °C, Agitate the specimen every five minutes for a period of 20 min. Rinse the specimen in cold water and dry at room temperature.

**B-2.2** Compare the colour of the treated test specimen with that of the untreated control sample. Bleeding is said to take place when the colour of the treated test specimen mute or blend on to the neighbouring colours to produce a mellowed and subdued shade effect.

NOTE **—** In case of washed cloth, which would have already been muted, there should only be a loss in the overall depth of the shade and muting will not be pronounce in character in comparison with the control sample.

**ANNEX C**

(*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*) | |
| Center of Excellence for Khadi (COEK)-NIFT, New Delhi |  | Representative | |
| Central Pollution Control Board, New Delhi |  | Shri P. K. Mishra  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  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*) | |
| 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  Shri K. Kathiresan (*Alternate*) | |
| BIS Directorate General |  | Shri J. K. Gupta, Scientist ‘E’/Director AND Head (Textiles) [Representing Director General (*Ex-officio*)] | |

*Member Secretary*

Shri Swapnil

Scientist ‘B’/Assistant Director

(Textiles), BIS