भारतीय मानक **IS 9560 : 2023**

Indian Standard

वस्त्रादि — रस्सियों और डोरियों की पहचान के लिए रंग संहिता

(पहला पुनरीक्षण)

Textiles — Colour Code for Identification of Ropes and Cordage

(First Revision)

ICS 59.080.50

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April 2023 **Price Group 4**

Cordage Sectional Committee, TXD 09

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards after the draft was finalized by the Cordage Sectional Committee and approved by the Textiles Division Council.

Colour coding's main purpose is to identify rope and cordage therefore these may be separated and organized easily. This colour coding is especially important in the manufacturing, storage and transportation process.

The following criteria have been used in evolving this code:

a) In order that the marking is easily identifiable, it is preferable to use colours that contrast with the remainder of the rope/cordage [the marker yarn(s) being placed within the rope/cordage] but rope/ cordage may be entirely of the same colour as the identification colour in some cases.

b) To avoid any confusion, it is necessary to reserve the colours selected for the identification marking of standard ropes and cordage exclusively for that purpose.

c) Marking should be simple. It is desirable to select only a limited number of colours for identification marking but identifying ropes/cordage made from different materials by the same colour should be avoided.

d) The marker yarn(s) should be placed inside the rope/cordage so that they remain recognizable despite soiling, soaking and discolouration of rope/cordage during use.

e) Details regarding fastness of the marker colours cannot be specified in view of the variety of possible end-uses. Properties such as fastness to water, to light and to sea water should be the subject of agreement between the manufacturer and the user.

This standard was first published in 1980. This revision has been made in the light of experience gained since its publication and to incorporate the following major changes:

a) Method for identification of material has been incorporated; and

b) References to Indian standards have been updated.

The composition of the committee responsible for the formulation of this standard is listed in Annex B.

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’.

Indian Standard

TEXTILES — COLOUR CODE FOR IDENTIFICATION OF ROPES AND CORDAGE

(First Revision)

1 SCOPE

1.1 This standard prescribes a colour code for the identification of ropes and cordage made from different natural and man-made fibres (covered by various Indian Standard specifications) by using yarn(s) of easily identifiable colour, placed inside the rope/cordage, or by colouring the rope/cordage entirely in the same colour.

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 editions of the standards listed in Annex A.

3 COLOUR CODE

3.1 The identifying colours and the methods for identification marking for ropes/cordage made from different materials shall be as given in Table 1. References to the relevant Indian Standard specifications are given in col (4) of the table.

3.1.1 The rope shall contain a distinctive coloured yarn or strand which identifies the load-bearing material. If several different materials are used as load-bearing elements of the rope, then the identification yarn or strand shall be cabled from yarns of the appropriate colour. The coloured yarn shall be durable and water resistant.

3.1.2 At least one strand in the core or at least one strand in the cover shall be made with yarn of the identification colour for the double-braid ropes. At least one strand shall contain a surface yarn marked with the identification colour for the laid ropes, eight-braid ropes, single braid ropes and parallel strand ropes. At least one strand in the braided cover in the parallel strand shall be made with yarn of the identified colour.

3.1.3 The marker yarn(s) shall be placed inside the rope/cordage.

Table 1 Colour Code for Identification of Ropes and Cordage Made from Natural and Man-Made Fibres
(*Clause* 3.1)

Sl No.	Material	Identifying Colour for the Material	Identification Marking (*See* Note 1)	Relevant Standard Specifications
(1)	(2)	(3)	(4)	(5)
i)	Manila: Grade I Grade II Grade III	Black	 One black yarn in each strand One black yarn each in two strands One black yarn in one strand	IS 1084
ii)	Sisal	Red	One red yarn in one strand	IS 1321
iii)	Polyamide	Green (*see* Note 2)	One green yarn in one strand	IS 4572 IS 6590
iv)	Polyester	Blue (*see* Note 2)	One blue yarn in one strand	IS 11066 IS 17608
v)	Polyethylene	Orange	One orange yarn in one strand, or rope wholly coloured orange	IS 8674
vi)	Polypropylene	Brown	One brown yarn in one strand or rope line wholly coloured brown	IS 5175

NOTES

1 In the case of cable-laid ropes, the requirement specified is for each of the primary ropes.

2 Choose a light enough green (for polyamide) and a deep enough blue (for polyester) so that there is no risk of confusion between the two colours**.**

ANNEX A
(*Clause* 2)

LIST OF REFERRED STANDARDS

IS No.	*Title*
IS 1084 : 2005	Textiles — Manila ropes — Specification (*fifth revision*)
IS 1321	Sisal ropes — Specification:
(Part 1) : 2003	Untarred varieties (*fourth revision*)
(Part 2) : 1982	Tarred varieties (*second revision*)
IS 4572 : 2022	Fibre ropes — Polyamide 3-, 4-, 8- and 12- Strand ropes (*fifth revision*)
IS 5175 : 2022	Fibre ropes — Polypropylene split film, monofilament and multifilament (PP2) and polypropylene high-tenacity multifilament (PP3) – 3-, 4-, 8- and 12-strand ropes (*fourth revision*)
IS 6590 : 2023	Specification for braided nylon rope for mountaineering purposes
IS 8674 : 2013	Fibre ropes — Polyethylene — 3- and 4-strand ropes (*third revision*)
IS 11066 : 2022	Fibre ropes — Polyester 3-, 4-, 8- and 12- strand ropes (*third revision*)
IS 17608 : 2021	Polyester fibre ropes — Double braid construction

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Cordage Sectional Committee, TXD 09

Organization	*Representative(s)*
Indian Institute of Technology Delhi	DR (PROF) R. CHATTOPADHYAY **(*Chairperson*)**
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SHRI ASHWANI KUMAR
SCIENTIST 'B'/ASSISTANT DIRECTOR
(TEXTILES), BIS

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