

भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

Draft for comments only

Doc: TXD 01 (25573) WC

May 2024

(Not to be reproduced without permission of BIS or used as Standard)

भारतीय मानक मसौदा

वस्त्रादि — कृत्रिम रेशा धागा — विद्युत प्रीतिरोध के मापन द्वारा इलेक्ट्रोस्टैटिक प्रवृत्ति ज्ञात करना

(Draft Indian Standard)

**TEXTILES — SYNTHETIC FILAMENT YARNS — ELECTROSTATIC
PROPENSITY EVALUATION BY MEASURING ELECTRICAL
RESISTANCE**

ICS 59.080.20

Physical Methods of Test Sectional Committee
TXD 01

Last date for receipt of comments
06 July 2024

NATIONAL FOREWORD

(Formal clauses will be added later)

This Indian Standard intended to be adopted is identical with ISO 24180 : 2021 'Textiles — Synthetic filament yarns — Electrostatic propensity evaluation by measuring electrical resistance' issued by the International Organization for Standardization (ISO).

Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In the standard intended to be adopted, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their respective places are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 139, Textiles — Standard atmospheres for conditioning and testing	IS 6359 : 2023 Method for conditioning of textiles	Technically Equivalent with ISO 139
ISO 2060, Textiles — Yarn from packages — Determination of linear density (mass per unit length) by the skein method	IS 1315 : 1977 Method for determination of linear density of yarns spun on cotton system	Indigenous

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)’.

1 SCOPE

This document specifies methods for electrostatic propensity evaluation by measuring electrical resistance of synthetic filament yarns.

It is applicable to synthetic filament yarns. Conductive yarns covered in this document are used for anti-static fabric. They are not used for transmission of electric signals, supply of electric power and electromagnetic shield and heating.

2 NORMATIVE REFERENCES

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For updated references, the latest edition of the referenced document (including any amendments) applies.

- i) ISO 139, Textiles — Standard atmospheres for conditioning and testing
- ii) ISO 2060, Textiles — Yarns from Packages — Determination of linear density (mass per unit length) by the skein method

2 TERMS AND DEFINITIONS

For the purposes of this document, the following terms and definitions apply.

2.1 Electrical resistance per unit length

Electrical resistance of a material per unit length

NOTE — It is expressed in Ω/m .

2.2 Volume resistivity

Quotient obtained when the potential gradient is divided by the current density

NOTE — It is expressed in Ω/m .

FORMAT FOR SENDING COMMENTS ON BIS DOCUMENTS

(Please use A4 size sheet of paper only and type within fields indicated. Comments on each clause/sub clause/table/fig etc. be started on a fresh box. Information in column 3 should include reasons for the comments and suggestions for modified working of the clauses when the existing text is found not acceptable. Adherence to this format facilitates Secretariat's work)

Please e-mail your comments to txd@bis.gov.in

NAME OF THE COMMENTATOR/ORGANIZATION:

DOCUMENT NO:

BIS LETTER REFERENCE NO. :

Item, Clause Sub-Clause No. Commented Upon (Use Separate Box a fresh)	Comments	Specific Proposal (Draft) Clause to be add/ amended	Remarks	Technical References and Justification on Which (2), (3), (4) are based
(1)	(2)	(3)	(4)	(5)