INTERNATIONAL STANDARD

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Textiles — Determination of the recovery from creasing of a folded specimen of fabric by measuring the angle of recovery —

Part 1: Method of the horizontally folded specimen

Textiles — Détermination de l'auto-défroissabilité d'une éprouvette d'étoffe pliée, par mesurage de l'angle rémanent après pliage —

Partie 1: Méthode de l'éprouvette pliée horizontalement

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 38,*Textiles*, Subcommittee SC 24, *Conditioning atmospheres and physical tests for textile fabrics,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 248,*Textiles and textile products,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 2313-1 cancels and replaces ISO 2313:1972, which has been technically revised.

The main changes compared to the previous edition are as follows:

— changing the normative reference ISO/R 139 to ISO 139;

— adding the tolerance of the load on the specimen in 5.1 a);

— redrafting the description about "Sampling and preparation of specimens" to improve clarity of meaning in Clause 6 (former Clause 6 and Clause 7);

— revising the distance from the selvedge while taking the specimen, i.e. from "not less than 50 mm" to "not less than 150 mm" in 6.2 (former 7.1);

— revising the requirement of atmosphere for conditioning and testing according to ISO 139 in Clause 7 (former 7.4);

— giving two crease recovery angles, i.e. "rapid crease recovery angle" obtained at 15 s after removal of the creasing load, and "delay crease recovery angle" obtained at 5 min after removal of the creasing load in Clause 3 and in 8.3.

— revising result expression from "Calculate the mean value to the nearest degree" to "Calculate the mean value rounded off to one decimal place" in Clause 9.

A list of all parts in the ISO 2313 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Creases in textile fabrics diminish at varying rates on the removal of the creasing forces. The magnitude of the crease recovery angle is an indication of the ability of a fabric to recover from accidental creasing.

The suitable method can be chosen according to the type or end-use of textile fabrics. The test results obtained by different methods are not comparable.

Textiles — Determination of the recovery from creasing of a folded specimen of fabric by measuring the angle of recovery —

Part 1: Method of the horizontally folded specimen

1 Scope

This document specifies a method for determining the angle of recovery of fabrics from creasing. The results obtained by this method for textile fabrics of very different kinds cannot be compared directly.

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 undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
crease recovery angle
angle formed between the two limbs of fabric specimen previously folded under prescribed conditions, at a specified time after removal of the creasing load

Note 1 to entry: In this method, rapid crease recovery angle is obtained at 15 s after removal of the creasing load.

Note 2 to entry: In this method, delay crease recovery angle is obtained at 5 min after removal of the creasing load.

4 Principle

A rectangular specimen of prescribed dimensions is horizontally placed in the flat surface and folded by means of a suitable device and maintained in this state for a specified time under a specified load. This creasing load is removed, the specimen is allowed to recover for a specified time, and then the crease recovery angle is measured.

Attention is drawn to the fact that for some types of fabrics, the limpness, thickness and tendency to curl of the specimen can give rise to very ill-defined crease recovery angles, and therefore an unacceptable lack of precision in making measurements. Many wool and wool mixture fabrics come under this heading.