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Textiles — Evaluation of the wrinkle recovery of fabrics — Appearance method

Textiles — Évaluation de la défroissabilité des étoffes — Méthode d'évaluation de l'aspect

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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 2, *Cleansing, finishing and water resistance tests.*

This third edition cancels and replaces the second edition (ISO 9867:2009), which has been technically revised.

The main changes are as follows:

— Clause 3, Terms and definitions, has been added and subsequent clauses have been renumbered;

— requirements for “Wrinkle tester” has been added in 5.1 (former 4.1);

— Figure 1 has been improved;

— a “timer” has been added in the list of apparatus in Clause 5 (former Clause 4);

— the requirements of atmospheres for preconditioning, conditioning and testing have been revised;

— addition of “If the rating appears between two ratings, intermediate rating can be used in increments of a half for a rating (for example, No. 3,5).” in 9.4 (Former 8.4);

— the description of wrinkle rating has been added in Table 1;

— the annex on the “Summary of an international interlaboratory study on wrinkle recovery of fabrics” has been deleted and the former Annex B has been relabelled as Annex A.

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.

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Textiles — Evaluation of the wrinkle recovery of fabrics — Appearance method

1 Scope

This document specifies a method for evaluating the appearance of textile fabrics after induced wrinkling.

This document is applicable to all kinds of textile fabrics.

NOTE A digital description of the ISO wrinkle replicas is given in Annex A.

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 105-A03, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining*

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
wrinkle recovery
property of a fabric which enables it to recover from wrinkling deformations

4 Principle

A test specimen is wrinkled under a specified atmospheric condition in a wrinkling device under a pre-determined load for a prescribed period of time. After reconditioned, the test specimen is evaluated for appearance by comparison with three-dimensional wrinkle recovery replicas or wrinkle rating description.

5 Apparatus and materials

5.1 Wrinkle tester (see Figure 1), consisting of the following parts:

a) a circular top flange and a circular bottom flange, with the diameter of (89,0 ± 0,5) mm, and the distance of (110 ± 1) mm between the initial position of the top flange and the bottom flange to ensure that the top flange can rotate (180 ± 1)° while moving down to the bottom. The mass of the top flange is approximately 500 g;

b) a weight-piece, with a mass of 3 500 g;

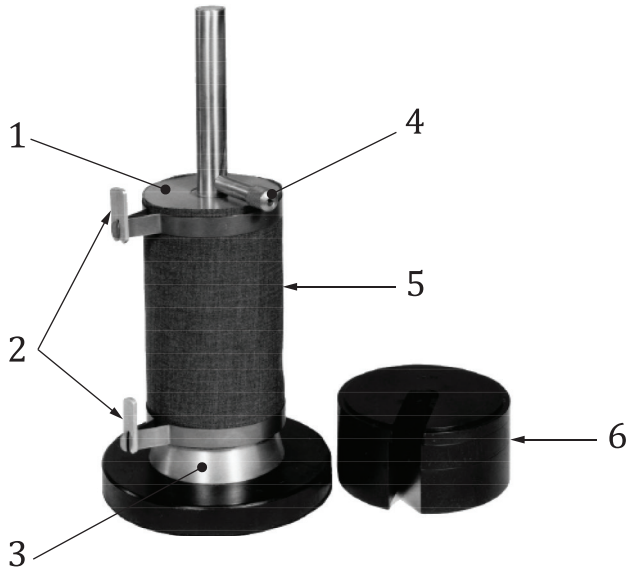
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c) specimen clamps, for holding the test specimen;

d) locking pin, for fixing the top flange in the initial position.

NOTE Equivalent devices can be used if they can be shown to lead to the same results.



Key

1 top flange
2 specimen clamps
3 bottom flange
4 locking pin
5 test specimen
6 weight-piece

Figure 1 — Wrinkle tester

5.2 Three-dimensional wrinkle recovery replicas (see Figure 2).

5.3 Lighting and evaluation area, in a darkened room, using the overhead lighting arrangement illustrated in Figure 3 and comprising the items described in the following list. The lamp dimensions should be chosen to extend beyond the overall surface of the test specimen and replicas, when used for the assessment.

a) **Two cool white (CW) fluorescent lamps**, without a baffle or glass, a minimum of 2 m in length each, placed side by side.

b) **One white enamel reflector**, without a baffle or glass.

c) **One thick plywood viewing board**, painted grey to match the Grade 2 on the grey scale for assessing staining in accordance with ISO 105-A03.

5.4 Clothes hangers with clips, to hang test specimens for conditioning and grading.

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