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Üldpõhimõtted**

Textiles - Tests for colour fastness - Part A01: General principles of testing

EESTI STANDARDI EESSÕNA

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English Version

**Textiles - Tests for colour fastness - Part A01: General
principles of testing (ISO 105-A01:2010)**

Textiles - Essais de solidité des coloris - Partie A01:
Principes généraux pour effectuer les essais (ISO 105-
A01:2010)

Textilien - Farbechtheitsprüfungen - Teil A01: Allgemeine
Prüfgrundlagen (ISO 105-A01:2010)

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Foreword

This document (EN ISO 105-A01:2010) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2010, and conflicting national standards shall be withdrawn at the latest by July 2010.

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Endorsement notice

The text of ISO 105-A01:2010 has been approved by CEN as an EN ISO 105-A01:2010 without any modification.

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Textiles — Tests for colour fastness —

Part A01:

General principles of testing

1 Scope

This part of ISO 105 provides general information about the methods for testing colour fastness of textiles for the guidance of users. The uses and limitations of the methods are pointed out, several terms are defined, an outline of the form of the methods is given and the contents of the clauses constituting the methods are discussed. Procedures common to a number of the methods are discussed briefly.

Colour fastness means the resistance of the colour of textiles to the different agents to which these materials may be exposed during manufacture and their subsequent use. The change in colour and staining of undyed adjacent fabrics are assessed as fastness ratings. Other visible changes in the textile material under test, for example surface effects, change in gloss or shrinkage, are considered as separate properties and reported as such.

The methods can be used not only for assessing colour fastness of textiles but also for assessing colour fastness of dyes. When a method is so used, the dye is applied to the textile in specified depths of colour by stated procedures and the material is then tested in the usual way.

For the most part, individual methods are concerned with colour fastness to a single agent, as the agents of interest in a particular case, and the order of application, will generally vary. It is recognized that experience and future developments in practice can justify procedures in which two or more agents are combined.

The conditions in the tests have been chosen to correspond closely to treatments usually employed in manufacture and to conditions of ordinary use. At the same time, they have been kept as simple and reproducible as possible. As it cannot be hoped that the tests will duplicate all the conditions under which textiles are processed or used, the fastness ratings are interpreted according to the particular needs of each user. They provide, however, a common basis for testing and reporting colour fastness.

2 Normative references

The following referenced documents are indispensable for the application 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-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

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

ISO 105-A04, *Textiles — Tests for colour fastness — Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics*

ISO 105-A05, *Textiles — Tests for colour fastness — Part A05: Instrumental assessment of change in colour for determination of grey scale rating*

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

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

CIE¹⁾ Publication 51, *A method for assessing the quality of daylight simulators for colorimetry*

3 General principle

A specimen of the textile to be tested, with adjacent fabric attached if staining is to be assessed, is subjected to the action of the agent in question. The extent of any change in colour and that of any staining of the adjacent fabric are assessed and expressed in fastness numbers.

4 Outline of form of the methods

The headings of the principal clauses of the individual test methods are as follows:

“Introduction”

“Scope”

“Normative references”

“Terms and definitions”

“Principle”

“Apparatus”, “Reagents” or “Reference materials”

“Test specimen”

“Procedure”

“Test report”

5 The “Scope” clause

Under this heading, in each method, are given the intended use of the method and the aspects covered, thereby indicating the limits of applicability.

Details of the principal natural and man-made fibres which can be submitted to each test are given. These lists are by no means exclusive, and any dyed or printed material not mentioned in the method (whether manufactured wholly from one fibre or from a mixture of fibres) can be submitted to the test. In such cases, it is necessary to verify and note whether the procedure is likely to cause any alteration in the material under test. This applies particularly to all man-made fibres (acrylic, pure or copolymer; polyvinyl, pure or copolymer; polyester, etc.) currently being developed, of which any list is always likely to be incomplete.

6 The “Normative references” clause

Under this heading, in each method, is given a complete list of other documents which are indispensable for the application of the method.

1) Commission internationale de l'éclairage, Central Bureau, Kegelgasse 27, A-1030, Vienna, Austria.