Textiles - Tests for colour fastness - Part C08: Colour fastness to domestic and commercial laundering using a non-phosphate reference detergent incorporating a Sh & low-temperature bleach activator



#### FESTI STANDARDI FESSÕNA

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 105-C08:2010 sisaldab Euroopa standardi EN ISO 105-C08:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.03.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 105-C08:2010 consists of the English text of the European standard EN ISO 105-C08:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 01.03.2010.

The standard is available from Estonian standardisation organisation.

ICS 59.080.01

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# EUROPEAN STANDARD NORME EUROPÉENNE

# **EN ISO 105-C08**

EUROPÄISCHE NORM

March 2010

ICS 59.080.01

Supersedes EN ISO 105-C08:2002

#### **English Version**

Textiles - Tests for colour fastness - Part C08: Colour fastness to domestic and commercial laundering using a non-phosphate reference detergent incorporating a low-temperature bleach activator (ISO 105-C08:2010)

Textiles - Essais de solidité des coloris - Partie C08: Solidité des coloris aux lavages domestiques et industriels, utilisant un détergent de référence sans phosphate comprenant un activateur de blanchiment à basse température (ISO 105-C08:2010) Textilien - Farbechtheitsprüfungen - Teil C08: Farbechtheit bei der Haushalts- und gewerblichen Wäsche unter Verwendung eines phosphatfreien Testwaschmittels und eines bei niedrigen Temperaturen wirkenden Bleichaktivators (ISO 105-C08:2010)

This European Standard was approved by CEN on 4 February 2010.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### **Foreword**

This document (EN ISO 105-C08:2010) 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 September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 105-C08:2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

#### **Endorsement notice**

The text of ISO 105-C08:2010 has been approved by CEN as a EN ISO 105-C08:2010 without any modification.

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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.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 105-C08 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 1, *Tests for coloured textiles and colorants*.

This second edition cancels and replaces the first edition (ISO 105-C08:2001), which has been technically revised. The dates of the references in Clause 2 have been removed, tolerances have been added in Clause 6 and instrumental measurement has been added to applicable clauses. It also incorporates ISO 105-C08:2001/Amd.1:2006 and a modified version of ISO 105-C08:2001/Cor.1:2002.

ISO 105 was previously published in 13 "parts", each designated by a letter (e.g. "Part A"), with publication dates between 1978 and 1985. Each part contained a series of "sections", each designated by the respective part letter and by a two-digit serial number (e.g. "Section A01"). These sections are now being republished as separate documents, themselves designated "parts" but retaining their earlier alphanumeric designations. A complete list of these parts is given in ISO 105-A01.

### Introduction

The test methods specified in ISO 105-C06 and that specified in this part of ISO 105 are intended to reflect the effect of laundering by domestic or commercial laundering procedures, as distinct from the washing test methods given in ISO 105-C10.

of testing and the state of the The general principles of testing described in ISO 105-A01 must be understood before using this part of ISO 105. This document is a preview denotated by Files

# Textiles — Tests for colour fastness —

# Part C08:

Colour fastness to domestic and commercial laundering using a non-phosphate reference detergent incorporating a low-temperature bleach activator

### 1 Scope

This part of ISO 105 specifies methods for determining the resistance of the colour of textiles of all kinds and in all forms to domestic or commercial laundering procedures used for normal household articles using a non-phosphate reference detergent incorporating a low-temperature bleach activator.

The colour loss and staining resulting from desorption and/or abrasive action in one single test closely approximates to one domestic or commercial laundering.

This method does not reflect the effect of optical brighteners present in some commercial washing products.

#### 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-A01:2010, Textiles — Tests for colour fastness — Part A01: General principles of testing

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 — Test for colour fastness — Part A05: Instrumental assessment of change in colour for determination of grey scale rating

ISO 105-F01, Textiles — Tests for colour fastness — Part F01: Specification for wool adjacent fabric

ISO 105-F02, Textiles — Tests for colour fastness — Part F02: Specification for cotton and viscose adjacent fabrics

ISO 105-F03, Textiles — Tests for colour fastness — Part F03: Specification for polyamide adjacent fabric

ISO 105-F04, Textiles — Tests for colour fastness — Part F04: Specification for polyester adjacent fabric

ISO 105-F05, Textiles — Tests for colour fastness — Part F05: Specification for acrylic adjacent fabric

ISO 105-F06, Textiles — Tests for colour fastness — Part F06: Specification for silk adjacent fabric

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ISO 105-F07, Textiles — Tests for colour fastness — Part F07: Specification for secondary acetate adjacent fabric

ISO 105-F10, Textiles — Tests for colour fastness — Part F10: Specification for adjacent fabric: Multifibre

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

### 3 Principle

A specimen of the textile in contact with specified adjacent fabric or fabrics is laundered, rinsed and dried. Specimens are laundered under appropriate conditions of temperature, alkalinity, bleaching and abrasive action such that the result is obtained in a conveniently short time. The abrasive action is accomplished by the use of an appropriate number of steel balls. The change in colour of the specimen and the staining of the adjacent fabric or fabrics are assessed with reference to the original fabric, either with the grey scales or instrumentally.

# 4 Reagents and materials

- 4.1 Reference detergent.
- 4.1.1 ECE<sup>1)</sup> non-phosphate reference detergent base powder (1998 formulation).
- **4.1.2 Bleach activator**, tetra-acetylethylene diamine (TAED).
- 4.1.3 Sodium perborate tetrahydrate.
- **4.2** Non-corrodible (stainless) steel balls, approximately 6 mm in diameter.
- **4.3** Adjacent fabrics (see ISO 105-A01).

NOTE Supplies of spun acetate might be limited due to decreased manufacturing.

Either

- **4.3.1** A multifibre adjacent fabric, complying with ISO 105-F10, according to the temperature used:
- a multifibre adjacent fabric (DW) containing wool and acetate (for tests at 40 °C and 50 °C and in certain cases, to be indicated in the test report, at 60 °C);
- a multifibre adjacent fabric (TV) not containing wool and acetate (in certain tests at 60 °C, and in all tests at 95 °C).

In the use of multifibre with wool, it should be taken into consideration that the combination of a temperature of 60 °C and sodium perborate might be harmful to the wool.

Or

**4.3.2** Two single-fibre adjacent fabrics, complying with the relevant standards ISO 105-F01 to ISO 105-F07. One of the adjacent fabrics shall be made of the same kind of fibre as that of the textile to be tested, or that predominating in the case of blends, and the second piece shall be made of the fibre indicated in Table 1 or, in the case of blends, of the kind of fibre second in order of predominance, or as otherwise specified.

<sup>1)</sup> European Colourfastness Establishment (ECE), Gartenstrasse 5, D-14169 Berlin, Germany.