

Tekstiil. Värvipüsivuskatsed. Osa A02: Hall skaala värvuse muutumise hindamiseks

Textiles - Tests for colour fastness - Part A02: Grey
scale for assessing change in colour

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 20105-A02:2000 sisaldab Euroopa standardi EN 20105-A02:1994 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 10.05.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 20105-A02:2000 consists of the English text of the European standard EN 20105-A02:1994.</p> <p>This document is endorsed on 10.05.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: See standard kirjeldab halli skaalat tekstiili värvuse muutumise hindamiseks värvipüsivuskatsetes ja skaala kasutamist. Skaala kolorimeetriline spetsifikatsioon on antud püsiva etaloni kujul, millega saab võrrelda uusi tööetalone ja muudetavaid etalone.</p>	<p>Scope:</p>
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Võtmesõnad: hall skaala, katsed, määramine, tekstiil, värvid, värvipüsivus, värvitoonivahed

Descriptors: Textiles, colour fastness, grey scale, change in colour.

English version

Textiles

Tests for colour fastness

Part A02: Grey scale for assessing change in colour
(ISO 105-A02:1993)

Textiles; essais de solidité des teintures.
Partie A02: Échelle de gris pour
l'évaluation des dégradations
(ISO 105-A02:1993)

Textilien; Farbechtheitsprüfungen.
Teil A02: Graumaßstab zur Bewertung
der Änderung der Farbe
(ISO 105-A02:1993)

This European Standard was approved by CEN on 1994-08-09 and is identical to the ISO Standard as referred to.

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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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

International Standard

ISO 105-A02 Textiles; tests for colour fastness; grey scale for assessing change in colour has been taken over as a European Standard by CEN/TC 248 'Textiles and textile products' from the work of ISO/TC 38 'Textiles' of the International Organization for Standardization (ISO).

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by February 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

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Endorsement notice

The text of the International Standard ISO 105-A02:1993 was approved by CEN as a European Standard without any modification.

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1 Scope

This part of ISO 105 describes the grey scale for determining changes in colour of textiles in colour fastness tests, and its use. A precise colorimetric specification of the scale is given as a permanent record against which newly prepared working standards and standards that may have changed can be compared.

2 Principle

2.1 The essential, or 5-step, scale consists of five pairs of non-glossy grey colour chips (or swatches of grey cloth), which illustrate the perceived colour differences corresponding to fastness ratings 5, 4, 3, 2 and 1. This essential scale may be augmented by the provision of similar chips or swatches illustrating the perceived colour differences corresponding to the half-step fastness ratings 4-5, 3-4, 2-3 and 1-2, such scales being termed 9-step scales. The first member of each pair is neutral grey in colour and the second member of the pair illustrating fastness rating 5 is identical with the first member. The second members of the remaining pairs are increasingly lighter in colour so that each pair illustrates increasing contrasts or perceived colour differences which are defined colorimetrically. The full colorimetric specification is given below.

2.2 The chips or swatches shall be neutral grey in colour and shall be measured with a spectrophotometer with the specular component included. The colorimetric data shall be calculated using CIE 1964 supplementary standard colorimetric system (10° observer data) for illuminant D₆₅.

2.3 The Y tristimulus value of the first member of each pair shall be 12 ± 1 .

2.4 The second member of each pair shall be such that the colour difference between it and the adjacent first member is as follows:

Fastness grade	CIELAB difference	Tolerance
5	0	0,2
(4-5)	0,8	$\pm 0,2$
4	1,7	$\pm 0,3$
(3-4)	2,5	$\pm 0,35$
3	3,4	$\pm 0,4$
(2-3)	4,8	$\pm 0,5$
2	6,8	$\pm 0,6$
(1-2)	9,6	$\pm 0,7$
1	13,6	$\pm 1,0$

(Bracketed values apply only to the 9-step scale.)

2.5 Use of the scale. Place a piece of the original textile and the tested specimen of it side by side in the same plane and oriented in the same direction. Place the grey scale nearby in the same plane. The surrounding field should be neutral grey colour approximately midway between that illustrating grade 1 and that illustrating grade 2 of the grey scale for assessing change in colour (this is approximately Munsell N5). If necessary to avoid effects of the backing on the appearance of the textiles, use two or more layers of the original textile under both original and tested specimens. Illuminate the surfaces with north sky light in the Northern hemisphere, south sky light in the Southern hemisphere, or an equivalent source with an illumination of 600 lx or more. The light should be incident upon the surfaces at approximately 45°, and the direction of viewing approximately perpendicular to the plane of the surfaces. Compare the visual difference between original and tested material with the differences represented by the grey scale.