Paper and board intended to come into contact with foodstuffs - Determination of colour fastness of dyed paper and board

EESTI STANDARDIKESKUS
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 646:2018 sisaldab Euroopa standardi EN 646:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 646:2018 consists of the English text of the European standard EN 646:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.11.2018.	Date of Availability of the European standard is 21.11.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 67.250, 85.060

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 646

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Supersedes EN 646:2006

English Version

Paper and board intended to come into contact with foodstuffs - Determination of colour fastness of dyed paper and board

Papiers et cartons destinés à entrer en contact avec les denrées alimentaires - Détermination de la solidité de la couleur des papiers et cartons colorés

Papier und Pappe vorgesehen für den Kontakt mit Lebensmitteln - Bestimmung der Farbechtheit von gefärbtem Papier und Pappe

This European Standard was approved by CEN on 22 July 2018.

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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 CEN-CENELEC 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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European foreword

This document (EN 646:2018) has been prepared by Technical Committee CEN/TC 172 “Pulp, paper and board”, the secretariat of which is held by DIN.

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 May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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

This document supersedes EN 646:2006.

With regard to EN 646:2006 the following changes have been made:

a) Clause 1 “Scope” has been revised and extended;

b) in Clause 6 “Reagents” the test fluid “saliva simulant ” has been removed and the test fluid “alkaline salt solution” has been introduced;

c) new test conditions, matching the use of the tested papers and boards have been included;

d) new definition for the glass fibre papers has been included;

e) evaluation against a grey scale only has been included;

f) editorial changes.

Attention shall be drawn to the fact that the glassfibre papers have not been duly validated before the publication of this standard.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document describes procedures for the testing of dyed paper and board intended to come into contact with foodstuffs. Some procedures depending on the foreseeable use of the material are given.

Visual evaluation against a grey scale provides grading of the bleeding.

For samples having significant different sides, a migration can occur from one glass fibre to the other and could lead to wrong interpretation of the fastness of one side. It is advisable to check these samples using large sampling procedure to prevent cross contamination of the glass fibre during the migration procedure. The procedure is described in Annex A. If lower limit of detection is required, this procedure could also be used.

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.

EN 20105-A03, *Textiles - Tests for colour fastness – Part A03: Grey scale for assessing staining (ISO 105-A03)*

EN ISO 186, *Paper and board - Sampling to determine average quality (ISO 186)*

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

ISO 6588-2, *Paper, board and pulps - Determination of pH of aqueous extracts – Part 2: Hot extraction*

3 Terms and definitions

For the purposes of this document, the following term and definition applies.

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
colour fastness
lack of transfer of colour from a paper to a non-stained glass-fibre paper, saturated with a test fluid and evaluated visually for staining against a grey scale

4 Principle

A sample is brought into contact with glass fibre papers which have been saturated with a test fluid and placed under load for a given time and temperature. The staining of the glass fibre paper is evaluated against a grey scale. The test fluids used are distilled or deionized water, diluted acetic acid, alkaline salt solution and olive oil depending on the type of contact expected.