

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

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 646:2006 sisaldab Euroopa standardi EN 646:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.06.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 646:2006 consists of the English text of the European standard EN 646:2006.</p> <p>This document is endorsed on 29.06.2006 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><b>Käsitlusala:</b> Standard kirjeldab protseduuri toiduainetega kokkupuutuva värvitud paberi ja kartongi teimimiseks. Esitatud on kaks protseduuri. Protseduur A pikaajalise kontakti jaoks (näiteks toiduainete pakendid) ja protseduur B lühiajalise kontakti jaoks (näiteks salvrätid, köögipaber, majapidamispaber).</p>	<p><b>Scope:</b> This document describes procedures for the testing of dyed paper and board intended to come into contact with foodstuffs. Two procedures are given. Procedure A for contact of long duration (e. g. food packaging) and procedure B for contact of short duration (e. g. napkins, kitchen papers, household papers).</p>
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ICS 67.250, 85.060

Võtmesõnad:

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 28 March 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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 United Kingdom.



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## Foreword

This document (EN 646:2006) 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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

This document supersedes EN 646:2000.

With regard to EN 646:2000 the following changes have been made:

- a) the test fluid "sodium carbonate solution" has been omitted and the test fluid "saliva simulant" has been introduced to cover a demand;
- b) editorial changes.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 United Kingdom.

## 1 Scope

This document describes procedures for the testing of dyed paper and board intended to come into contact with foodstuffs. Two procedures are given. Procedure A for contact of long duration (e. g. food packaging) and procedure B for contact of short duration (e. g. napkins, kitchen papers, household papers).

Visual evaluation against a blank is used only in order to detect any bleeding (yes/no) while evaluation against a grey scale provides grading of the bleeding.

## 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 8787, *Paper and board — Determination of capillary rise — Klemm method*

## 3 Terms and definitions

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

### **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 or a blank

## 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. The staining of the glass fibre paper is evaluated with the grey scale. The staining of the glass fibre paper is evaluated against a blank or grey scale. The test fluids used are distilled or deionised water, dilute acetic acid, saliva simulant and olive oil depending on the type of contact expected.

## 5 Materials and equipment

**5.1 Unstained glass fibre papers** of 60 mm × 90 mm. The glass fibre papers shall meet the following conditions:

- a) grammage 70 g/m<sup>2</sup>;
- b) capillary rise of 190 mm to 210 mm in 10 min in accordance with ISO 8787;
- c) free from fluorescent whitened and wet strength agents;
- d) free from cellulosic fibres.

**5.2 Glass plates**, 60 mm × 90 mm.

**5.3 Polyethylene film**, uncoloured and transparent.

**5.4 Mass**, 1 kg.

**5.5 Grey scale** in accordance with EN 20105 A03. This is only needed when grading is required.