Coil coated metals - Test methods - Part 15: Metamerism

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13523-15:2002 sisaldab Euroopa standardi EN 13523-15:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13523-15:2002 consists of the English text of the European standard EN 13523-15:2002.

This document is endorsed on 18.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This Part of EN 13523 defines terms of the procedure for determining the metamerism of a colour match of an organic coating on a metallic substrate. When two colour specimens have identical spectral reflection curves, they are matching under any illuminant irrespective of its spectral characteristics. This is termed a "spectral match". It is also possible for two colour specimens having different spectral reflection curves to match visually under a given light source but not to match under another light source with different spectral characteristics: such matches are termed "metameric"

Scope:

This Part of EN 13523 defines terms of the procedure for determining the metamerism of a colour match of an organic coating on a metallic substrate. When two colour specimens have identical spectral reflection curves, they are matching under any illuminant irrespective of its spectral characteristics. This is termed a "spectral match". It is also possible for two colour specimens having different spectral reflection curves to match visually under a given light source but not to match under another light source with different spectral characteristics; such matches are termed "metameric"

ICS 17.180.20, 25.220.60

Võtmesõnad: coating materials, coatings, definition, definitions, index of metamerism, metal coating, metals, paints, testing

EUROPEAN STANDARD

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NORME EUROPÉENNE EUROPÄISCHE NORM

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English version

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Tôles prélaquées - Méthodes d'essai - Partie 15: Métamérisme Bandbeschichtete Metalle - Prüfverfahren - Teil 15: Metamerie

This European Standard was approved by CEN on 11 April 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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Foreword

This document EN 13523-15:2002 has been prepared by Technical Committee CEN/TC 139 "Paints and varnishes", 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 January 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

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

1 Scope

This Part of EN 13523 defines terms of the procedure for determining the metamerism of a colour match of an organic coating on a metallic substrate.

When two colour specimens have identical spectral reflection curves, they are matching under any illuminant irrespective of its spectral characteristics. This is termed a "spectral match". It is also possible for two colour specimens having different spectral reflection curves to match visually under a given light source but not to match under another light source with different spectral characteristics; such matches are termed "metameric".

One quantitative description of metamerism is the so-called "metamerism index".

The information of the metamerism index is of limited value where ΔE (instrumental colour difference for a given illuminant, see EN 13523-3:2001) is > 0,5. The metamerism index is not suited for determining the absolute colour difference or colour constancy of a given specimen at change of illuminant.

The colour difference under the reference illuminant is to be measured in colour coordinates L^* , a^* and b^* (see EN 13523-3:2001).

Excluded from this method are organic coatings producing fluorescence and/or which are multicoloured, pearlescent or metallic.

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 13523-0:2001, Coil coated metals — Test methods — Part 0: General introduction and list of test methods.

EN 13523-3:2001, Coil coated metals — Test methods — Part 3: Colour difference — Instrumental comparison.

EN 23270:1991, Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing (ISO 3270:1984).