

**Paints and varnishes - Determination of
specular gloss of non-metallic paints films
at 20°, 60° and 85°**

Paints and varnishes - Determination of specular
gloss of non-metallic paints films at 20°, 60° and 85°

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 2813:1999 sisaldab Euroopa standardi EN ISO 2813:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 2813:1999 consists of the English text of the European standard EN ISO 2813:1999.</p> <p>This document is endorsed on 23.11.1999 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:</p> <p>This standard is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products. It specifies a test method for determining the specular gloss of paint film using a reflectometer geometry of 20°, 60° and 85°. The method is not suitable for the measurement of the gloss of metallic paints.</p> <p>a) The 60° geometry is applicable to all paints films, but for very high gloss and near-matt films 20° or 85° may be more suitable. b) The 20° geometry, which uses a smaller receptor aperture, is intended to give improved differentiation between high-gloss paint films (i.e. films with a 60° specular gloss higher than about 70 units).</p> <p>c) The 85° geometry is intended to give improved differentiation between low-gloss paint films (i.e. films with a 60° specular gloss lower than about 10 units).</p>	<p>Scope:</p> <p>This standard is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products. It specifies a test method for determining the specular gloss of paint film using a reflectometer geometry of 20°, 60° and 85°. The method is not suitable for the measurement of the gloss of metallic paints.</p> <p>a) The 60° geometry is applicable to all paints films, but for very high gloss and near-matt films 20° or 85° may be more suitable. b) The 20° geometry, which uses a smaller receptor aperture, is intended to give improved differentiation between high-gloss paint films (i.e. films with a 60° specular gloss higher than about 70 units).</p> <p>c) The 85° geometry is intended to give improved differentiation between low-gloss paint films (i.e. films with a 60° specular gloss lower than about 10 units).</p>
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ICS 87.040

Võtmesõnad: films, gloss, measurement, optical tests, paint coats, paints, specular reflection, tests

English version

Paints and varnishes

**Determination of specular gloss of non-metallic
paint films at 20°, 60° and 85°**

(ISO 2813 : 1994, including Technical Corrigendum 1 : 1997)

Peintures et vernis – Détermination
de la réflexion spéculaire de feuillets de
peinture non-métallisée à 20°, 60° et
85° (ISO 2813 : 1994, Rectificatif
Technique 1 : 1997 inclus)

Beschichtungsstoffe – Bestimmung
des Reflektometerwertes von
Beschichtungen (außer Metallic-
Beschichtungen) unter 20°, 60° und
85° (ISO 2813 : 1994, einschließlich
Technische Korrektur 1 : 1997)

This European Standard was approved by CEN on 1999-04-01.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 2813 : 1994 Paints and varnishes – Determination of specular gloss of non-metallic paint films at 20°, 60° and 85°,

which was prepared by ISO/TC 35 'Paints and varnishes' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 139 'Paints and varnishes', the Secretariat of which is held by DIN, as a European Standard.

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 October 1999 at the latest.

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

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 2813 : 1994, including Technical Corrigendum 1 : 1997, was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

1 Scope

This International Standard is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products.

It specifies a test method for determining the specular gloss of paint films using a reflectometer geometry of 20°, 60° or 85°. The method is not suitable for the measurement of the gloss of metallic paints.

- a) The 60° geometry is applicable to all paint films, but for very high gloss and near-matt films 20° or 85° may be more suitable.
- b) The 20° geometry, which uses a smaller receptor aperture, is intended to give improved differentiation between high-gloss paint films (i.e. films with a 60° specular gloss higher than about 70 units).
- c) The 85° geometry is intended to give improved differentiation between low-gloss paint films (i.e. films with a 60° specular gloss lower than about 10 units).

NOTES

- 1 The same geometry should, of course, be retained for a series of measurements even if this means disregarding the suggested limits.
- 2 In some cases, the determination of specular gloss may not correspond to a visual assessment.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions

of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1512:1991, *Paints and varnishes — Sampling of products in liquid or paste form.*

ISO 1513:1992, *Paints and varnishes — Examination and preparation of samples for testing.*

ISO 2808:1991, *Paints and varnishes — Determination of film thickness.*

3 Definition

For the purposes of this International Standard, the following definition applies.

3.1 specular gloss: The ratio of the luminous flux reflected from an object in the specular direction for a specified source and receptor angle to the luminous flux reflected from glass with a refractive index of 1,567 in the specular direction.

NOTE 3 To define the specular-gloss scale, polished black glass with a refractive index of 1,567 is assigned the value of 100 for geometries of 20°, 60° and 85°.

4 Required supplementary information

For any particular application, the test method specified in this International Standard needs to be completed by supplementary information. The items of supplementary information are given in annex A.