



SLOVENSKI STANDARD
SIST EN ISO 4528:2009
01-april-2009

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Vitreous and porcelain enamel finishes - Selection of test methods for vitreous and porcelain enamelled areas of articles (ISO 4528:2000)

Emails und Emailierungen - Auswahl von Prüfverfahren für emailierte Flächen von Erzeugnissen (ISO 4528:2000)

Finitions des émaux vitrifiés - Choix des méthodes d'essai applicables aux surfaces émaillées de pièces (ISO 4528:2000)

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Ta slovenski standard je istoveten z: EN ISO 4528:2009

ICS:

25.220.50 Emailne prevleke Enamels

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 4528

January 2009

ICS 25.220.50

English Version

**Vitreous and porcelain enamel finishes - Selection of test
methods for vitreous and porcelain enamelled areas of articles
(ISO 4528:2000)**

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applicables aux surfaces émaillées de pièces (ISO
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emailierte Flächen von Erzeugnissen (ISO 4528:2000)

This European Standard was approved by CEN on 13 December 2008.

CEN members are bound to comply with the CEN/GENELEC 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 CEN 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

The text of ISO 4528:2000 has been prepared by Technical Committee ISO/TC 107 “Metallic and other inorganic coatings” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 4528:2009 by Technical Committee CEN/TC 262 “Metallic and other inorganic coatings” the secretariat of which is held by BSI.

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 July 2009, and conflicting national standards shall be withdrawn at the latest by July 2009.

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

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, 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 the United Kingdom.

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INTERNATIONAL STANDARD

**ISO
4528**

First edition
2000-03-01

Vitreous and porcelain enamel finishes — Selection of test methods for vitreous and porcelain enamelled areas of articles

*Finitions des émaux vitrifiés — Choix des méthodes d'essai applicables
aux surfaces émaillées de pièces*

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Tel. + 41 22 749 01 11
Fax + 41 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

International Standard ISO 4528 was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*.

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Introduction

Standard test methods are required for measuring and controlling the properties and hence also the quality of vitreous and porcelain enamelled finishes.

To ensure that these finishes meet the requirements of various applications, test methods should be chosen to measure the properties that are important to the function of a specific enamelled article.

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Vitreous and porcelain enamel finishes — Selection of test methods for vitreous and porcelain enamelled areas of articles

1 Scope

This International Standard is a guide to the selection of test methods for evaluating the performance of vitreous and porcelain enamelled finishes in different applications. It references the test methods available for measuring the properties of these finishes, and correlates these properties to requirements of specific enamelled articles.

It is limited for the most part to test methods that are described in ISO International Standards and does not provide acceptance criteria or performance limits for the properties.

This International Standard applies to all enamelled articles irrespective of their basis metals.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards:

ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method.*

ISO 2360, *Non-conductive coatings on non-magnetic basis metals — Measurement of coating thickness — Eddy current method.*

ISO 2722, *Vitreous and porcelain enamels — Determination of resistance to citric acid at room temperature.*

ISO 2742, *Vitreous and porcelain enamels — Determination of resistance to boiling citric acid.*

ISO 2743, *Vitreous and porcelain enamels — Determination of resistance to condensing hydrochloric acid vapour.*

ISO 2744, *Vitreous and porcelain enamels — Determination of resistance to boiling water and water vapour.*

ISO 2745, *Vitreous and porcelain enamels — Determination of resistance to hot sodium hydroxide.*

ISO 2746, *Vitreous and porcelain enamels — Enamelled articles for service under highly corrosive conditions — High voltage test.*

ISO 2747, *Vitreous and porcelain enamels — Enamelled cooking utensils — Determination of resistance to thermal shock.*

ISO 4530, *Vitreous and porcelain enamelled manufactured articles — Determination of resistance to heat.*

ISO 4531-1, *Vitreous and porcelain enamels — Release of lead and cadmium from enamelled ware in contact with food — Part 1: Method of test.*