

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

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National foreword

This British Standard is the UK implementation of EN ISO 4528:2009. It is identical with ISO 4528:2000. It supersedes BS ISO 4528:2000 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee STI/36, Vitreous enamel coatings.

A list of organizations represented on this committee can be obtained on request to its secretary.

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This British Standard, having been prepared under the direction of the Sector Committee for Materials and Chemicals, was published under the authority of the Standards Committee and comes into effect on 15 May 2000

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Amendments/corrigenda issued since publication

Date	Comments
31 May 2009	This corrigendum renumbers BS ISO 4528:2000 as BS EN ISO 4528:2009

English Version

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

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

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

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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of an identical text or by endorsement, at the latest by July 2009, and conflicting national standards shall be withdrawn at the latest by July 2009.

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Endorsement notice

The text of ISO 4528:2000 has been approved by CEN as a EN ISO 4528:2009 without any modification.

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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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.*