

Vitreous and porcelain enamels - Enamelled cooking utensils - Determination of resistance to thermal shock (ISO 2747:1998)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 2747:2022 sisaldab Euroopa standardi EN ISO 2747:2022 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 2747:2022 consists of the English text of the European standard EN ISO 2747:2022.
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Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.09.2022.	Date of Availability of the European standard is 28.09.2022.
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English Version

Vitreous and porcelain enamels - Enamelled cooking
utensils - Determination of resistance to thermal shock
(ISO 2747:1998)

Émaux vitrifiés - Ustensiles de cuisson émaillés -
Détermination de la résistance aux chocs thermiques
(ISO 2747:1998)

Emails und Emailierungen - Emailierte Kochgeschirre
- Bestimmung der Temperaturwechselbeständigkeit
(ISO 2747:1998)

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European foreword

The text of ISO 2747:1998 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 2747:2022 by Technical Committee CEN/TC 262 "Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys" 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of an identical text or by endorsement, at the latest by March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.

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Endorsement notice

The text of ISO 2747:1998 has been approved by CEN as EN ISO 2747:2022 without any modification.

Foreword

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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.

International Standard ISO 2747 was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*, Subcommittee SC 6, *Vitreous and porcelain enamels*.

This second edition cancels and replaces the first edition (ISO 2747:1973), which has been technically revised.

Annex A of this International Standard is for information only.

Vitreous and porcelain enamels — Enamelled cooking utensils — Determination of resistance to thermal shock

1 Scope

This International Standard specifies a method of determining, by successive thermal shock tests, the behaviour of vitreous and porcelain enamelled cooking utensils and similar articles under sudden changes of temperature (resistance to thermal shock).

2 Definitions

For the purposes of this International Standard, the following definitions apply.

2.1 thermal shock test: Series of operations commencing with the pouring of cold water into the heated test specimen and ending when the thermal shock temperature for the subsequent thermal shock test has been reached.

2.2 thermal shock temperature: Temperature to which the test specimen is heated before being chilled with cold water.

2.3 thermal shock resistance: Difference between the thermal shock temperature and the water temperature at which the test specimen shows the first damage on chilling or during subsequent heating.

2.4 damage: Chipping or tension cracks in the enamel visible at a distance of 250 mm by normal sight or made visible by using coloured penetrating fluids.

3 Principle

A series of single thermal shock tests is conducted with a temperature increase of 20 °C between each thermal shock obtained by heating the test specimen from the outside and then chilling it inside with water at 20 °C.

For the first test, the thermal shock temperature amounts to 200 °C. The test ends when the first visible damage occurs.