

Cookware — Ovenware for use in domestic thermal ovens

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National foreword

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Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion into a European Standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its three-year life. The commencement of the review period will be notified by an announcement in *Update Standards*.

According to the replies received by the end of the review period, the responsible BSI committee will decide whether to support the conversion into a European Standard, to extend the life of the prestandard or to withdraw it. Comments should be sent in writing to the Secretary of BSI Technical Committee CW/9, Cooking and catering containers, at 389, Chiswick High Road, London W4 4AL, giving the document reference and clause number and proposing, where possible, an appropriate revision of the text.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

Summary of pages

This document comprises a front cover, an inside front cover, the ENV title page, pages 2 to 22, an inside back cover and a back cover.

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English version

Cookware - Ovenware for use in conventional domestic ovens

Articles culinaires - Articles culinaires à usage domestique
conçus pour la cuisson au four conventionnel

Kochutensilien - Ofengeschirre zur Verwendung in
Haushalts-Backöfen

This European Prestandard (ENV) was approved by CEN on 17 September 2000 as a prospective standard for provisional application.

The period of validity of this ENV is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard.

CEN members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

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Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 194 "Utensils in contact with food", the secretariat of which is held by BSI.

The annexes A to K are normative.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies safety and performance requirements for items of ovenware for use in conventional domestic ovens. It is applicable to all ovenware regardless of material or method of manufacture.

It is applicable to products intended for use both 'on top of the stove' and 'in oven'.

This standard is not applicable to metal casseroles, items for single use, throwaway ovenware or ovenware intended for use in a microwave oven only.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These 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 1183, *Materials and articles in contact with foodstuffs - Test methods for thermal shock and thermal shock endurance.*

EN ISO 2064, *Metallic and other non-organic coatings - Definitions and conventions concerning the measurement of thickness (ISO 2064:1980).*

EN ISO 2360, *Non-conductive coatings on non-magnetic basis metals - Measurement of coating thickness - Eddy current method (ISO 2360:1982).*

EN ISO 2409: 1994, *Paints and varnishes - Cross-cut test (ISO 2409:1992).*

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

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

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

ISO 4532, *Vitreous and porcelain enamels - Determination of the resistance of enamelled articles to impact – Pistol test.*

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply:

3.1

ovenware

Utensil, in the form of a hollow or flat container, intended for use in the cooking of food either solid or liquid

NOTE Ovenwares includes the follow items :

- Gratin and roasting dishes used in the preparation and cooking of vegetable and meat dishes.
- Ceramic casseroles: used in the preparation and cooking of meats and/or vegetables.
- Bakeware: used in the preparation and cooking of various types of dough mixtures. Bakeware varies in shape and may include removable parts.
- Paté mould: used in the preparation and cooking of patés.

3.2

fixing system

Attachment method, or methods, utilized in fastening a handle to the body of an item of ovenware or to fix a knob to a lid where the handle or knob are not an integral part of the body or lid

3.3

furniture

Generic term covering handles and knobs which are attached to the body or lid of ovenware using a fixing system (3.2) and intended to facilitate the carrying and handling of the article in normal use.

3.4

removable furniture

Furniture designed to be attached and removed from the body or lid of ovenware without the use of tools

3.5

capacity

Volume of water contained when the ovenware is filled to the brim while standing on a level surface

3.6

usable capacity

Two thirds of the capacity

NOTE the true usable capacity of ovenware varies with the food being cooked. The figure given here is an average value intended for use in test situations only and not as information to the consumer.

3.7

coating

Deposit and/or coating applied to a substrate to obtain specific performance properties independent of the properties of the substrate

3.8

non-stick coating

Coating usually applied to the interior of an item of ovenware to achieve an anti-adherent effect during cooking and facilitate cleaning.

3.9

easy clean coating

Coating applied to the interior of an item of ovenware to facilitate cleaning.

3.10

vitreous enamel

Inorganic non-metallic material formed from a mixture of mineral compounds, applied to a metallic substrate and fused at high temperature to form a homogeneous coating.

3.11

glaze

Substance resulting from the melting or sintering of inorganic constituents and designed to form a surface layer which is fused or is capable of being fused in one or more coats and the firing temperature of which is higher than 500°C.

3.12

organic coating

Material formed from a mixture of resins and polymers, applied to a metallic substrate, cured at low temperatures to form a homogeneous coating

3.13

tinning or tin plating

Deposition of a thin coating of tin onto a steel substrate to ensure protection against corrosion.

3.14

glass

Inorganic non-metallic material produced by the complete fusion of a mixture of raw materials at high temperature into a homogeneous liquid which is then cooled to a rigid condition essentially without crystallization

3.15

glass-ceramic

Inorganic non-metallic material, produced by the complete fusion of a mixture of raw materials at high temperature, into a homogeneous liquid which is then cooled into a rigid material and heat treated to achieve a certain degree of crystallization, mainly submicroscopic small crystallites.

3.16

ceramic

Inorganic non-metallic material formed by firing a mixture of raw materials at high temperature. The firing temperature is high enough to give the necessary strength to the article, which is already shaped, but lower than the temperature which is necessary to achieve complete fusion of the mixture.

3.17

popping

Distinctive sound made by the application of a load to the apparently flat base of an item of ovenware due to the sudden transformation of the base from convex to concave.

4 Materials

No specific requirements for material(s) of manufacture for ovenware are given in this standard.

Ovenware shall be made of materials of a type and purity that, under normal conditions of use, present no toxic hazards nor in any way affect the organoleptic qualities of food prepared in it.

5 General conditions for testing

Unless otherwise specified, all measurements shall be verified on an unused item of ovenware at ambient temperature of $(23 \pm 5)^\circ\text{C}$

6 Construction

NOTE Requirements 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5 and 6.1.6 may be verified on the same item of ovenware.

6.1 General

6.1.1 Stability

The product shall be stable when placed empty without lid on a level surface.

6.1.2 Hygiene

All surfaces intended to come into contact with food shall be easily cleanable under normal circumstances.

6.1.3 Mechanical hazards

All components shall be free from burrs, splinters or sharp edges that could cause injury or discomfort to the user.

6.1.4 Handle position with respect to ovenware

Handles shall be positioned above the centre of gravity of the item of ovenware when filled with sand to its capacity.

6.1.5 Knob Design

It shall be possible to use the knob for its normal purposes while using an oven glove or cloth. In addition the knob shall remain firmly attached to the lid after exposing it to a temperature 20°C above the manufacturer's maximum recommended temperature, or 250°C where no recommendation is given, for 30 min.