

SLOVENSKI STANDARD

SIST EN 13750:2003

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Domestic water kettles for use on top of stove, cooker or hob - Requirements and test methods

Haushaltswasserkessel zur Verwendung auf einem Ofen, Herd oder Kochmulde -
Definitionen, Anforderungen und Prüfmethoden

Bouilloires a usage domestique pour cuisinieres et plaques de cuisson - Prescriptions et
méthodes d'essai

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97.040.60

Kuhinjska posoda, jedilni
servisi in jedilni pribor

Cookware, cutlery and
flatware

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13750

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ICS 97.040.60

English version

**Domestic water kettles for use on top of stove, cooker or hob -
Requirements and test methods**

Bouilloires à usage domestique pour cuisinières et plaques
de cuisson - Définitions, prescriptions et méthodes d'essai

Haushaltswasserkessel zur Verwendung auf einem Ofen,
Herd oder Kochmulde - Definitionen, Anforderungen und
Prüfmethoden

This European Standard was approved by CEN on 9 September 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 13750:2002 (E)**Foreword**

This document (EN 13750:2002) has been prepared by Technical Committee CEN /TC 194 "Utensils in contact with food", 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

For checks for suitability for various heat sources, see ENV 12983-2.

Annexes A, B, C, D, E and F 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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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1 Scope

This European Standard specifies safety and performance requirements of domestic water kettles for use on top of a stove, cooker or hob and applies to all kettles regardless of material or method of manufacture.

This standard does not apply to electric kettles.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative 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 30-1-1, *Domestic cooking appliances burning gas fuel - Part 1-1: Safety - General*.

EN 12983-1:2000, *Cookware - Domestic cookware for use on top of a stove, cooker or hob - Part 1: General requirements*.

EN ISO 2064, *Metallic and other inorganic coatings - Definitions and conventions concerning the measurement of thickness (ISO 2064:1996)*.

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

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

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

water kettle

utensil, in the form of a hollow container, intended for use for the boiling of water on the top of a stove, cooker or hob, with or without a whistle, with or without a lid and with a spout

3.2

whistle

audible indicating device activated by the steam while the water is boiling

3.3

fixing system

method of fastening a handle to the body of a water kettle or of fixing a knob to a lid or whistle

3.4

capacity

largest amount of water that can be boiled the kettle without ejection of water

3.5

handle

projection affixed to the body of a water kettle and intended to facilitate the carrying and holding of the article in normal use

EN 13750:2002 (E)**3.6****knob**

short projection integral with or affixed to the lid or whistle of a water kettle and intended to facilitate positioning or removal of the lid or whistle in normal use

3.7**furniture**

handles and knobs

3.8**base diameter**

dimension, measured on the exterior base of the water kettle, across the maximum circumference of contact when placed on a flat surface, or across the maximum circle which fits into the area of the base

4 Material

Water kettles shall be made of material 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 them.

5 Construction**5.1 General**

When empty and also when filled to its capacity and positioned on a 5° inclined plane with its centre of gravity in the least favourable position, the kettle shall be stable.

All components shall be finished smooth and free from burrs, splinters or sharp edges. The body shall be watertight up to and including boiling.

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5.2 Handle

It shall be possible to grip the handle for its normal purpose without the hand or fingers coming into contact with any surface whose temperature exceeds the values given in 6.2.3 for the relevant materials.

The handle or handgrip of the kettle and the lid knob shall be of a material rigid up to 150 °C (EN 12983-1:2000, annex B). The shape of the handle or handgrip shall provide a secure grip to prevent backward and forward slipping in the hand and shall be so designed that it is possible to handle the kettle without the user's hand coming into contact any metal part of the kettle body or handle brackets.

5.3 Knob

It shall be possible to grip the knob(s) for its (their) normal purpose without the hand or fingers coming into contact with any surface whose temperature exceeds the values given in 6.2.3 for the relevant materials.

5.4 Lid

When the water kettle is tilted through 90° from the horizontal in the direction of pouring, with the lid correctly seated, the lid shall remain in position and clear of the user's hand.

5.5 Whistle

The whistle shall remain in place while the water is boiling and when whistling.

5.6 Spout

The spout, if not integral, shall be joined to the body in a leakproof manner. The spout itself shall be leakproof.

5.7 Base

The base, if not integral, shall be joined to the body in a leakproof manner.

5.8 Venting

The kettle shall be vented, e.g. by the spout so that escaping steam does not reach the user's hand when lifting or emptying the kettle.

5.9 Pouring

When tested as described in annex A, the liquid shall flow cleanly from the spout. Individual droplets may flow back on to the side wall but there shall no continuous dribbling.

5.10 Diameters

Any claimed diameter shall be within ± 5 mm of the measured diameter.

5.11 Base form

The base, when viewed from beneath, shall not be convex nor become convex when tested in accordance with annex M of EN 12983-1:2000.

5.12 Capacity

The actual capacity shall not be less than the claimed capacity.

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6 Furniture

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6.1 Materials

No specific requirements for materials or combinations of materials for the manufacture of water kettle furniture are given in this standard, but any material used shall comply with the requirements of the appropriate tests.

6.2 Properties

6.2.1 General

It is not the intention that all these tests are conducted in sequence. Except where otherwise stated, each test stands alone.

6.2.2 Fatigue resistance

When the kettle is tested as described in annex B, a handle assembly shall withstand 15 000 cycles, without visible distortion or loosening of the handle or its fixing system.

6.2.3 Thermal hazards

When the kettle is tested as described in annex C, the following temperatures shall not be exceeded:

- | | |
|--------------------------|--------|
| a) uncoated metal | 55 °C; |
| b) plastics | 70 °C; |
| c) wood | 89 °C; |
| d) ceramic, glass, stone | 66 °C. |

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Water kettles, which do not comply with the requirements of this test, shall carry a warning to use appropriate protection.

It shall not be possible to touch, with a spherical probe of 14 mm in diameter, any metal part contained within the insulated portion of the furniture, which has a temperature exceeding 55 °C, when tested as described in annex C.

7 Coatings**7.1 General**

Coatings may be decorative, protective or energy related.

7.2 Vitreous enamel on steel and cast iron**7.2.1 Boiling water test**

When the interior enamel coat is tested in accordance with ISO 2744, the weight loss shall not exceed 1,5 g/m² for the liquid phase and 3,0 g/m² for the vapour phase over a test period of 24 h.

7.2.2 Resistance to impact

When tested in accordance with ISO 4532, the exterior enamel shall show no damage greater than 2 mm after 24 h.

7.3 Vitreous enamel on aluminium – Adhesion test

When the kettle is tested as described in annex D, exposure of the base metal shall not exceed 3 mm from the test edge.

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7.4 Hard anodised aluminium**7.4.1 Thickness**

The minimum average thickness of a hard anodised coating shall be 25 µm, when measured as specified in EN ISO 2064 and EN ISO 2360. This check shall be carried out only where the hard anodised coating is not covered by a separate coat of a different material.

7.4.2 Stain resistance

When the kettle is tested as described in annex E, there shall be no staining visible on any surface intended to come into contact with food.

7.4.3 Alkali resistance

When the kettle is tested as described in annex F, there shall be no loss of the insulating properties of the coating of any surface intended to come into contact with food.

7.4.4 Hardness

Coating claimed to be “hard anodised” shall have a hardness greater than 350 HV 0,5 or equivalent.

8 Product information

8.1 Point of sale information

All products or their packaging shall be labelled with the following information so that it is visible at the point of sale:

- a) an indication as to the type, material and capacity of the product, e.g. 1,0 l, aluminium whistling kettle;
- b) a listing of the heating sources for which the product is suitable;
- c) the name of the manufacturer, importer or retailer and name or reference number of the product.

NOTE Item b) can be achieved by the use of generally accepted symbols. Suitable symbols are under consideration.

8.2 Care and use instructions

All products shall be accompanied by care, safety and use instructions, including the following:

- a) advise on preparation before first use;
- b) advise on cleaning after use;
- c) advise on care of furniture;
- d) advise on obtaining optimum energy efficiency;
- e) general safety advise (see 5.6, 5.7, 5.9 and 6.2.3);
- f) advise on what to do if the product proves to be unsatisfactory;
- g) name and contact address of manufacturer or importer.