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Interested committees:

Title: Draft BS EN 12778 Cookware - Pressure cookers for domestic use.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Cookware - Pressure cookers for domestic use

Articles culinaires à usage domestique - Autocuiseurs à usage domestique

Kochgeschirre - Dampfdruckkochtöpfe für den Hausgebrauch

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 194.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (prEN 12778:2019) has been prepared by Technical Committee CEN/TC 194 “Utensils in contact with food”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12778:2002.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Minor revision has been included to take into account the requirements specified in the Pressure Equipment Directive 2014/68/EU.

1 Scope

This document defines terms, establishes manufacturing, safety and functional requirements and corresponding tests, and specifies data for marking, labelling and instructions for use, for pressure cookers.

This document is applicable to portable pressure cookers for domestic use, with gross volume up to 25 l, with working pressure over 4 kPa and less than 150 kPa, with either integrated or independent heating.

NOTE All pressures mentioned in this text are related to atmospheric pressure.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 30-1-1:2008+A3:2013, *Domestic cooking appliances burning gas fuel — Part 1-1: Safety - General*

EN 60335-1:2012¹⁾, *Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2010, modified)*

EN 60335-2-15:2016²⁾, *Household and similar electrical appliances — Safety — Part 2-15: Particular requirements for appliances for heating liquids (IEC 60335-2-15:2012, modified)*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

pressure cooker

cookware equipped with a removable lid being able to be fitted, specifically for the purpose of allowing cooking of foodstuffs by water and/or steam under pressure

Note 1 to entry: It can be used on a stovetop or can be equipped with an integrated heating source.

3.2

capacity

volume of water held when the pressure cooker, without the lid, is filled to the brim while standing on a level surface

1) This document is impacted by the amendments: EN 60335-1:2012/A1:2019, EN 60335-1:2012/A2:2019, EN 60335-1:2012/A11:2014, EN 60335-1:2012/A13:2017 and EN 60335-1:2012/A14:2019.

2) This document is impacted by the amendment EN 60335-2-15:2016/A11:2018.

3.3**gross volume**

internal volume of the pressure cooker limited by the body and the lid

3.4**usable capacity**

two thirds of the capacity

3.5**independent heating**

heat source not constituting an integral part of the pressure cooker

3.6**integrated heating**

heat source which constitutes an integral part of the pressure cooker

3.7**working pressure**

actual pressure(s) at which cooking takes place

3.8**control pressure**

pressure(s) declared by the manufacturer or supplier, at which the pressure control device works

3.9**maximum allowable pressure PS**

maximum pressure for which the pressure cooker is designed, specified by the manufacturer

3.10**pressure control device**

device which stabilises the pressure inside the pressure cooker during use

3.11**safety device**

device which prevents the pressure cooker from exceeding the safety pressure

3.12**pressure indicator**

visual and/or acoustic device indicating that there is a pressure inside the cooker

Note 1 to entry: It can be one of the four types specified in 4.5.3.

3.13**safe opening system**

system manual or automatic intended to prevent the pressure cooker from opening when it is under pressure

Note 1 to entry: These systems can be used independently or coupled with the decompression system.

3.13.1**manual system**

system actuated manually or automatically during or after the closing operation, intended to prevent the pressure cooker opening until the user unlocks the system with a manual action distinct from the opening operation, or carries out an operation contained in the sequence of events normally carried out to open

the pressure cooker operation, or carries out an operation contained in the sequence of events normally carried out to open the pressure cooker

3.13.2

automatic system

system which automatically prevents the pressure cooker from being opened if the internal pressure is higher than a certain value

Note 1 to entry: This system is automatically unlocked, without any user's action, when the internal pressure is equal to or below this value, and before any opening operation can be affected (see 4.5.6).

3.14

decompression device

device intended to reduce, by its own action, the internal pressure of the pressure cooker, by a substantial emission of steam accumulated in the cooker

Note 1 to entry: There are two types of decompression device: coupled and uncoupled.

3.14.1

coupled device

decompression device, coupled to the safe opening system of the pressure cooker

Note 1 to entry: This device, as long as it is not activated, automatically prevents the opening of the pressure cooker.

3.14.2

uncoupled device

decompression device independent of the safe opening system of the pressure cooker, activated by a manual action, distinct from the opening operation

3.15

closed pressure cooker

pressure cooker in which an internal pressure higher than 4 kPa can be reached

3.16

opened pressure cooker

pressure cooker in which no device prevents the separation of the lid from the body

3.17

opening and closing device

all devices which affect the opening and closing of the appliance and its pressure tightness

3.18

progressive opening

system of opening where depressurisation of the pressure cooker can be controlled by the user during the opening operation

4 Requirements

4.1 General

Test and check methods relating to each of the following paragraphs are described in the corresponding paragraphs of Clause 5.

4.2 Material

Materials used for the construction of the pressure cooker:

- shall have mechanical characteristics suitable for its manufacture and use;
- shall have adequate chemical resistance. They shall not be damaged under the effect of water, food and domestic cleaning products, in any way which may adversely affect the pressure cooker's operation or safety;
- shall not be sensitive to ageing or corrosion during their expected lifetime, to any extent that may adversely affect the pressure cooker's operation or safety.

The pressure cooker 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.

Coatings shall comply with the requirements of EN 12983-1:2000.

NOTE All the requirements for materials to comply with Directive 2014/68/UE are not addressed in this document.

4.3 Manufacturing characteristics

4.3.1 The pressure cooker and its devices and accessories shall be designed and constructed so that all they require in the way of maintenance in addition to the maintenance specified by the manufacturer or supplier, is simple cleaning carried out without using special instruments.

Particular care shall be taken over the finish of inside surfaces so that cleaning can be carried out thoroughly and easily.

Surfaces shall not present any defects like blisters, blowholes, or cracks which could collect dirt.

No part of the pressure cooker shall have sharp edges that could injure the user.

4.3.2 The outside base of the pressure cooker shall not become convex.

This requirement is checked:

- at room temperature ($23\text{ °C} \pm 5\text{ °C}$);
- when hot before and after the ageing of the bottom in accordance with 5.3.2.2;
- at declared control pressures during test 5.5.2.3.

The concavity of the bottom of the pressure cooker at room temperature, before and after ageing of the bottom as described in 5.3.2 shall be maximum 6 % of the diameter of the bottom measured at room temperature.

The maximum 6 % concavity requirement is not applicable to pressure cookers which are exclusively for use on exposed flame heat sources and/or exclusively for use on induction heat sources, which shall be marked as indicated in Clause 6 nor to pressure cookers with an integrated heat system.

The diameter of the bottom of the pressure cooker shall fulfil the requirements of 6.2.3 of EN 12983-1:2000.

4.3.3 Lids shall be easy to set and safe to use when the pressure cooker is used in accordance with the manufacturer's instructions. The area of the pressure cooker's external closure system, or closing ring, shall be shaped so as to prevent any jets of steam released from directly hitting the user or the handles.