
Naprave, trdna goriva in naprave za vžiganje žara - 4. del: Žari za enkratno uporabo na trdna goriva - Zahteve in preskusne metode

Appliances, solid fuels and firelighters for barbecuing - Part 4: Single use barbecues burning solid fuels - Requirements and test methods

Geräte, feste Brennstoffe und Anzündhilfen zum Grillen - Teil 4: Grillgeräte für den Einmalgebrauch (Einweggrills) zur Verwendung mit festen Brennstoffen - Anforderungen und Prüfverfahren

Appareils, combustibles solides et allume-feu pour la cuisson au barbecue - Partie 4 : Barbecues à usage unique utilisant les combustibles solides - Exigences et méthodes d'essais

Ta slovenski standard je istoveten z: EN 1860-4:2023

ICS:

75.160.10	Trda goriva	Solid fuels
97.040.20	Štedilniki, delovni pulti, pečice in podobni aparati	Cooking ranges, working tables, ovens and similar appliances

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EUROPEAN STANDARD

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This European Standard was approved by CEN on 21 May 2023.

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

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European foreword

This document (EN 1860-4:2023) has been prepared by Technical Committee CEN/TC 281 “Appliances, solid fuels and firelighters for barbecuing”, the secretariat of which is held by UNE.

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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by June 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1860-4:2004.

EN 1860-4:2023 includes the following significant technical changes with respect to EN 1860-4:2004:

- a) the Introduction has been removed;
- b) Clause 1, *Scope*, has been updated – the second and the third paragraphs have been added;
- c) Clause 2, *Normative references*, has been updated;
- d) Clause 5, *Test methods*, has been revised;
- e) Figure 6 has been added to Clause 6, *Marking*;
- f) the Bibliography has been updated.

A list of all parts in the EN 1860 series, published under the general title *Appliances, solid fuels and firelighters for barbecuing*, can be found on the CEN website.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

EN 1860-4:2023 (E)**1 Scope**

This document is applicable to single use barbecues which burn solid fuels.

This document specifies requirements for materials, construction, design and test methods to ensure safe use and satisfactory performance.

This document is intended to reduce the risks which may occur during and through barbecuing with solid fuels.

This document deals with the reasonably foreseeable hazards presented by single use barbecues when used by adults. Very vulnerable people can have needs that go beyond the level of safety addressed in this document.

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 1860-2, *Appliances, solid fuels and firelighters for barbecuing — Part 2: Barbecue charcoal and barbecue charcoal briquettes — Requirements and test methods*

EN 1860-3, *Appliances, solid fuels and firelighters for barbecuing — Part 3: Firelighters for igniting solid fuels for use in barbecues and grill applications — Requirements and test methods*

3 Terms and definitions

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

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

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

3.1**barbecue**

appliance designed for cooking in the open air by means of radiant and possible convection heat and consisting at least of a fuel compartment and a cooking grid or a rotating spit

3.2**single use barbecue**

barbecue designed in such a way that it cannot be used more than once and having been used once is no longer suitable for use and shall be disposed of safely

3.3**fuel compartment**

part of the barbecue where the fuel is burnt

3.4**grate**

perforated part of the barbecue on which the fuel is placed

3.5**ash compartment
ash catcher**

parts of the barbecue intended to catch any ash or embers which may fall from the fuel compartment or grate

3.6**usable area**

any area of a barbecue component and accessories intended to come into contact with the food to be barbecued during cooking is regarded as being usable

3.7**stand**

support structure of a barbecue onto which the functional parts of the barbecue are located

3.8**cooking grid**

part of the barbecue on which the food to be cooked is placed

3.9**silk paper**

thin, soft, relatively hard to tear paper with a mass between 12 g/m² and 25 g/m² usually used to wrap delicate objects

Note 1 to entry: In this document, the silk paper is used for thermal testing.

4 Requirements**4.1 General requirements**

Coatings shall withstand the test as described in 5.2.

NOTE Relevant legislation on surfaces of, and coatings on parts of the barbecue coming into contact with the food to be barbecued, cooking grid, spit, meat forks and gravy trays, can be found for example in Regulation (EC) No 1935/2004.

When operating and manipulating the single use barbecue, accessible edges and corners shall be free from burr. Rough surfaces, sharp edges and corners which may cause injury are not allowed.

All accessible parts of the barbecue components made of sheet or tube of thickness less than 0,7 mm without coating shall be as shown in Figures 1, 2, 3 and 4:

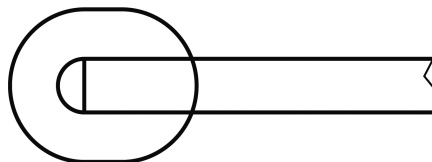


Figure 1 — Fully edged

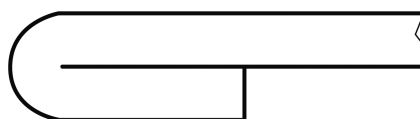


Figure 2 — Folded and flattened

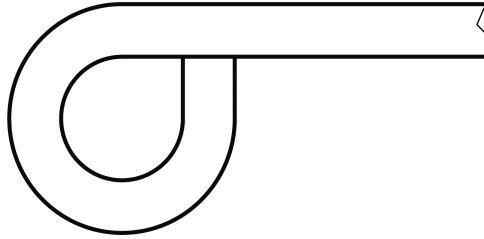


Figure 3 — Rolled and closed

Dimensions in millimetres

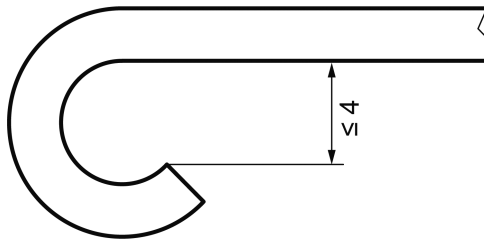


Figure 4 — Rolled and half closed

After testing in accordance with 5.2 to 5.5 a single use barbecue fails if:

- any dimension of any component distorts more than 5 %;
- any component cracks and/or fractures appear;
- any component falls off;
- the temperature of the base on which the barbecue is placed has exceeded 70 °C during the test.

The single use barbecue shall consist of at least a fuel compartment, grid, stand, solid fuel and firelighter. It shall be designed for one use only and safe disposal.

The fuel shall be in accordance with EN 1860-2. For the granulometry test of EN 1860-2, the test sample may only have a mass of 10 kg.

The firelighter shall be in accordance with EN 1860-3.

To avoid any additional use of the single barbecue the grid shall not be removable without making the single use of the barbecue unusable. The grid shall be fixed to the fuel compartment in such a way that its removal can only be done by deliberate action of the operator making the single use barbecue unusable.

To avoid fire after use or after disposal, the packaging of the single use barbecue shall be incombustible. In case that the packaging is combustible, other means to extinguish the single use barbecue after use shall be provided together with the single use barbecue.

Single use barbecues shall withstand the thermal test in 5.2 and the dynamic test in 5.5.

4.2 Requirements for parts

4.2.1 Cooking grid

The clear distance between the bars of the cooking grid shall not exceed 20 mm before, during and after testing according to 5.2 and 5.5. This requirement relates to the usable area of the grid, which shall be at least 80 % of the horizontal area of the fuel compartment, vertically projected.

If the cooking grid has the function of a grate, the clear distance between the bars of the grate and between the grate and the edges of the fuel container in the horizontal position shall not exceed 15 mm and in the vertical position shall not exceed 20 mm before, during and after testing according to 5.2 and 5.5.

The permanent deformation of the cooking grid when tested according to 5.2 shall not exceed 5 % relative to the length of the grid.

There shall be no cracking of the grid following the thermal test.

4.2.2 Fuel compartment

4.2.2.1 General

The fuel compartment shall withstand the thermal test without cracking or melting.

4.2.2.2 Ash catcher

The single use barbecue shall be equipped with an ash catcher or shall be designed so that it is not possible for any embers or fuel to fall out. This shall be verified during testing.

4.2.2.3 Depth of the ash compartment

The minimum depth of the fuel compartment shall be as indicated in Table 1. The minimum depth shall be available over 80 % of the usable area of the fuel compartment.

Table 1 — Minimum depth of the fuel compartment

Grid size diameter or longest side measurement [mm]	Minimum depth of fuel compartment [mm]
≤ 400	50
> 400	60

The fuel compartment shall be designed in accordance with Table 1, even if there is an ash catcher.

4.2.3 Stand

A means shall be provided to prevent accidental movement of the stand or barbecue during normal use.

A locking and/or unlocking device shall not operate unintentionally.

4.2.4 Grate

The maximum opening in the grate shall not exceed 8 mm.

4.2.5 Starting the barbecue

A safe and easy method to start the single use barbecue shall be included in the instructions supplied with the product.

EN 1860-4:2023 (E)**4.2.6 Cooking**

A single use barbecue shall provide at least 45 min cooking time once the flames and smoke from the firelighter have ceased, and ash appears.

5 Test methods**5.1 General**

The requirements given in Clause 4 shall be verified by visual examination, linear measurement, function testing and/or calculation, unless otherwise specified.

Testing shall be carried out at an ambient temperature of (20 ± 5) °C, in still air (i.e., air speed < 0,5 m/s).

5.2 Thermal test

The single use barbecue is placed on a horizontal plane made of plywood approximately 25 mm thick with a matt black painted surface.

The firelighter is lit, the single use barbecue operated, and the surface temperature of the plywood is constantly measured for as long as it takes for the charcoal to burn completely.

The single use barbecue is placed loaded and operated as described in 5.2 except the plywood is of natural colour and additionally covered with white silk paper.

The size of the test area shall correspond to the single use barbecue installation area, plus a margin of 250 mm all round. During the test the paper shall not burn, and the plywood shall not become singed.

5.3 Stability

The single use barbecue is placed on a plane made of plywood at an angle of 10° to the horizontal. To prevent the single use barbecue from slipping or rotating, it may be stopped at the contact points without restricting the possibility of tipping over. The single use barbecue shall not tip over in any of the most unfavourable positions and conditions for use.

Then the single use barbecue shall be placed on a horizontal plane loaded with 1 kg/dm² of the usable area of the grid uniformly distributed.

During these two tests the requirements of 4.1 a), b) and c) shall be verified by visual examination and linear measurement.

5.4 Cooking grid

The single use barbecue is placed as described in 5.2. The cooking grid is loaded with 0,5 kg/dm² of the usable area.

The load shall be removed after one minute.

The permanent deformation of the cooking grid shall be measured and shall not exceed 5 % of its longest size.

5.5 Dynamic test

The single use barbecue is placed as described in 5.2.

The impactor will consist of a pendulum having a total mass of 50 % of the mass of the single use barbecue.

Place the pendulum in relation to the single use barbecue unit as shown in Figure 5. The test shall be carried out at three positions on the unit, two adjacent sides and a corner, whilst the single use barbecue is not fixed to the surface on which it is standing.