



SLOVENSKI STANDARD

SIST EN 1860-3:2023

01-september-2023

Nadomešča:

SIST EN 1860-3:2004

SIST EN 1860-3:2004/A1:2006

Naprave, trdna goriva in naprave za vžiganje žara - 3. del: Vžigalniki za vžiganje trdnih goriv v žaru in uporaba žara - Zahteve in preskusne metode

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

Geräte, feste Brennstoffe und Anzündhilfen zum Grillen - Teil 3: Anzündhilfen zum Befeuern fester Brennstoffe für den Einsatz in Grillen und bei Grillanwendungen - Anforderungen und Prüfverfahren

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Appareils, combustibles solides et allume-feu pour la cuisson au barbecue - Partie 3 : Allume-feu pour l'allumage des combustibles solides dans les appareils de cuisson au barbecue et au gril - Exigences et méthodes d'essai

Ta slovenski standard je istoveten z: EN 1860-3:2023

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

SIST EN 1860-3:2023

en,fr,de

EUROPEAN STANDARD

EN 1860-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2023

ICS 75.160.10

Supersedes EN 1860-3:2003

English Version

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

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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

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

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EN 1860-3:2023 (E)**European foreword**

This document (EN 1860-3:2023) 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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by June 2024.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 1860-3:2003 and EN 1860-3:2003/A1:2006.

EN 1860-3:2023 includes the following significant technical changes with respect to EN 1860-3:2003 and EN 1860-3:2003/A1:2006:

- 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 3, *Terms and definitions*, has been revised and new terms were added;
- e) Subclause 4.1, *Safety*, has been revised and the performance requirement on *ignition time* has been removed;
- f) Clause 5, *Marking and instructions for use*, has been revised;
- g) Annex C, *Method of test for ignition performance of a firelighter*, has been removed;
- h) 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.

1 Scope

This document specifies the safety, performance, consumer packaging and marking requirements including the test methods for firelighters used to light solid fuels in barbecue and grill appliances.

This document covers firelighters supplied as either solid, liquid, thickened liquid or gel formulations. However, the use of highly flammable liquids (except in stabilized formulations) is specifically excluded from the scope of this document as their use as barbecue firelighters is regarded as highly dangerous.

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

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 1860-2:2023, *Appliances, solid fuels and firelighters for barbecuing — Part 2: Barbecue charcoal and barbecue charcoal briquettes — Requirements and test methods*

EN 15408, *Solid recovered fuels — Methods for the determination of sulphur (S), chlorine (Cl), fluorine (F) and bromine (Br) content*

EN 16181, *Soil, treated biowaste and sludge — Determination of polycyclic aromatic hydrocarbons (PAH) by gas chromatography (GC) and high-performance liquid chromatography (HPLC)*

EN ISO 1516, *Determination of flash/no flash — Closed cup equilibrium method (ISO 1516)*

EN ISO 1523, *Determination of flash point — Closed cup equilibrium method (ISO 1523)*

EN ISO 2555, *Plastics — Resins in the liquid state or as emulsions or dispersions — Determination of apparent viscosity using a single cylinder type rotational viscometer method (ISO 2555)*

EN ISO 2719, *Determination of flash point — Pensky-Martens closed cup method (ISO 2719)*

EN ISO 3104, *Petroleum products — Transparent and opaque liquids — Determination of kinematic viscosity and calculation of dynamic viscosity (ISO 3104)*

EN ISO 3219-2, *Rheology — Part 2: General principles of rotational and oscillatory rheometry (ISO 3219-2)*

EN ISO 3679, *Determination of flash point — Method for flash no-flash and flash point by small scale closed cup tester (ISO 3679)*

EN ISO 8317, *Child-resistant packaging — Requirements and testing procedures for reclosable packages (ISO 8317)*

EN ISO 12058-1, *Plastics — Determination of viscosity using a falling-ball viscometer — Part 1: Inclined-tube method (ISO 12058-1)*

EN ISO 13736, *Determination of flash point — Abel closed-cup method (ISO 13736)*

EN ISO 14596, *Petroleum products — Determination of sulfur content — Wavelength-dispersive X-ray fluorescence spectrometry (ISO 14596)*

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EN ISO 16994, *Solid biofuels — Determination of total content of sulfur and chlorine (ISO 16994)*

ISO 3105, *Glass capillary kinematic viscometers — Specifications and operating instructions*

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**solid firelighter**

solid substance or preparation to be used to ignite solid barbecue fuels in barbecue and grill appliances, which is readily ignitable by the application of a naked flame

3.2**liquid firelighter**

liquid substance or preparation to be used to ignite solid barbecue fuel used in barbecue and grill appliances when supported on a solid substrate, which is readily ignitable by the application of a naked flame

3.3**thickened liquid firelighter**

thickened liquid substance or preparation to be used to ignite solid barbecue fuel used in barbecue and grill appliances when supported on a solid substrate, which is readily ignitable by the application of a naked flame

3.4**gel firelighter**

gel substance or preparation to be used to ignite solid barbecue fuel used in barbecue and grill appliances when supported on a solid substrate, which is readily ignitable by the application of a naked flame

3.5**barbecue fuel**

barbecue charcoal, barbecue charcoal briquettes and other briquetted solid fuels

3.6**barbecue charcoal**

solid remainder of carbonization of wood or other vegetable matter that does not spit or spark abnormally when burning and has not been artificially chemically treated or artificially chemically prepared whereby the main constituent is carbon and the ash content is minimal

[SOURCE: EN 1860-2:2023, 3.1]

3.7**barbecue charcoal briquette**

compressed barbecue charcoal particles with a food-compatible binder or without a binder

[SOURCE: EN 1860-2:2023, 3.4]

3.8

other briquetted solid fuels

other forms of wood and vegetable matter that can be burnt to release energy and that have not been artificially chemically treated or artificially chemically prepared, providing heat and light through the process of combustion

3.9

consumer package

consumer packaging

individual unit, as purchased by the consumer at a retail store containing the firelighter product

4 Requirements

4.1 Safety

4.1.1 General

Application of this subclause presupposes awareness of applicable legal requirements.

4.1.2 Firelighter composition

Firelighters shall not contain any substance or preparation classified as persistent, bioaccumulative or toxic (PBT-substances). Firelighters shall not contain any substance or preparation classified very persistent and very bioaccumulative (vPvB-substances).

NOTE Relevant legislation can be found for example in Regulation (EU) No. 253/2011 and Regulation (EC) No. 1907/2006 (REACH).

Firelighters (solid, liquid, thickened liquid or gel) shall have a:

- a) PAH (poly aromatic hydrocarbons) content $\leq 1,0$ % (w/w) when determined in accordance with the test method of EN 16181.
- b) sulfur content $\leq 0,5$ % (w/w) when determined in accordance with the test methods of either EN 15408, EN ISO 14596 or EN ISO 16994.

4.1.3 Flashpoint of liquid, thickened liquid and gel firelighters

The flashpoint of any liquid firelighter shall be at least 60 °C when determined in accordance with the test method as detailed in either EN ISO 1516, EN ISO 1523, EN ISO 2719, EN ISO 3679, or EN ISO 13736.

NOTE Relevant legislation can be found, for example, in Regulation (EC) No 1272/2008 (CLP Regulation).

4.1.4 Viscosity of thickened liquid or gel firelighters

The kinematic viscosity of any thickened liquid or gel firelighter shall be greater than 20,5 mm²/s at 40 °C when determined in accordance with the test method as detailed in either EN ISO 2555, EN ISO 3104, ISO 3105, EN ISO 3219-2 or EN ISO 12058-1.

NOTE Relevant legislation can be found, for example, in Regulation (EC) No 1272/2008 (CLP Regulation).

4.1.5 Stability of the mixture of thickened liquid or gel firelighters

Any separation of free liquid occurring in a bottle of thickened liquid or gel firelighter shall be reversed and the thickened liquid or gel shall be reconstituted by shaking the bottle and allowing the contents to settle.

EN 1860-3:2023 (E)**4.2 Performance****4.2.1 Burning characteristics****4.2.1.1 Solid firelighters**

When tested in accordance with the test procedure described in B.3.1, the firelighter shall ignite readily and shall burn steadily, without flaring, sudden deflagrations, sparking, spitting, popping, dripping, explosion or loss of integrity until the firelighter is totally consumed.

4.2.1.2 Liquid, thickened liquid or gel firelighters

When tested in accordance with the test procedure described in B.3.2, the firelighter shall ignite readily and shall burn steadily, without flaring, sudden deflagrations, sparking, spitting, popping, dripping, explosion or loss of integrity until the firelighter is totally consumed.

4.2.2 Safety in use

When tested in accordance with the test procedures described in A.4.1 and A.4.2, the firelighter shall ignite readily and shall burn steadily, without flaring, sudden deflagrations, sparking, spitting, popping, dripping or explosion, from ignition until it has burned to extinction. When applied to a naked flame using the test procedure described in A.4.3, the firelighter shall not flare or flash back or ignite into the bottle.

4.3 Consumer packaging**4.3.1 General**

iTeh STANDARD PREVIEW

The firelighter shall be packaged in such a way as to contain the product, protect the consumer, prevent environmental pollution and facilitate safe handling, storage and transportation.

4.3.2 Solid firelighters

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When tested in accordance with the test method described in Annex C, the consumer packaging shall maintain its integrity, quality of sealing, freedom from stains and dryness.

4.3.3 Liquid, thickened liquid or gel firelighters

4.3.3.1 A child-resistant closure shall be fitted, and it shall be tested in accordance with EN ISO 8317.

4.3.3.2 The consumer package shall have a dosing device that shall be firmly attached to the package. The dosing device shall not detach from the package when a vertical pulling force is applied to the outlet plug of the dosing device in accordance with the test procedure described in D.2.4.

4.3.3.3 The consumer package shall have a protective device to prevent contents from running out when the package is open and horizontally orientated in such a way as to allow contents to escape. The maximum emission shall not exceed 10 ml.

4.3.3.4 The consumer package shall withstand being dropped from a height of 1 m onto a concrete floor such that the package is not damaged to an extent that its contents can leak out.

4.3.3.5 When tested in accordance with the test method described in Annex D, it shall be verified that the consumer package maintains its integrity and that the requirements given in 4.3.3.1 to 4.3.3.4 are met.