

Specification for chemical firelighters in solid form used for the ignition of solid fuels in residential heating and cooking appliances

ICS 75.160.10; 97.180

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee RHE/28, Domestic solid mineral fuel appliances, upon which the following bodies were represented:

- British Association for Chemical Specialists
- British Charcoal Group
- Caravan Club
- Consumer Policy Committee of BSI
- Department of Trade and Industry

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 May 2001

BSI 05-2001

Amendments issued since publication

The following BSI references relate to the work on this standard:
Committee reference RHE/28
Draft for comment 99/701872 DC

Amd. No.	Date	Comments

ISBN 0 580 33243 8

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Foreword

This standard has been prepared under the direction of the Refrigerating, Heating and Air Conditioning Standards Policy Committee, RHE/-. It is a new standard and no other standard is superseded.

This standard deals with chemical firelighters in solid form used to light solid fuels in residential heating and cooking appliances, excluding barbecue appliances, and specifies the safety, performance, packaging and marking requirements for the product. Methods of test for verifying the requirements are also given as normative annexes.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with this British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 21 and a back cover.

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1 Scope

This British Standard specifies the safety, performance, packaging and marking requirements including the methods of test for chemical firelighters in solid form used to light solid fuels in residential heating and cooking appliances.

NOTE These chemical firelighters may sometimes be used to light campfires or bonfires.

This British Standard neither covers firelighters used to light solid fuels in barbecue appliances nor gas powered firelighters.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references the latest edition of the publication referred to applies.

BS 1251, *Specification for open fireplace components*.

BS 1846-1, *Glossary of terms relating to solid fuel burning equipment — Part 1: Domestic appliances*.

BS 2000-57, *Methods of test for petroleum and its products — Part 57: Petroleum products — Determination of the smoke point of kerosine*.

BS 2000-107, *Methods of test for petroleum and its products — Part 107: Determination of sulfur — Lamp combustion method*.

BS 2000-156, *Methods of test for petroleum and its products — Part 156: Liquid petroleum products — Determination of hydrocarbon types — Fluorescent indicator adsorption method*.

BS 2000-170, *Methods of test for petroleum and its products — Part 170: Petroleum products and other liquids — Determination of flash point — Abel closed cup method*.

BS 3900-A8, *Methods of test for paints — Part A8: Test for flash/no flash (closed cup equilibrium method)*.

BS 3900-A9, *Methods of test for paints — Part A9: Determination of flashpoint (closed cup equilibrium method)*.

BS 3900-A13, *Methods of test for paints — Part A13: Test for flash/no flash (rapid equilibrium method)*.

BS 4834:1990, *Specification for inset open fires without convection with or without boilers, burning solid mineral fuels*.

BS 6999, *Specification for vitreous-enamelled low-carbon-steel flue pipes, other components and accessories for solid-fuel-burning appliances with a rated output of 45 kW*.

BS EN ISO 13736, *Petroleum products and other liquids — Determination of flash point — Abel closed cup method*.

BS EN 22719, *Methods of test for petroleum and its products — Petroleum products and lubricants. Determination of flash point — Pensky-Martens closed cup method*.

EN 57, *Petroleum products — Determination of flash point — Abel-Pensky closed tester*.

ISO 1516, *Test for flash/no flash (closed cup equilibrium method)* [Equivalent to BS 3900-A8:1986 (1991)].

ISO 1523, *Determination of flash point (closed cup equilibrium method)* [Equivalent to BS 3900-A9:1986 (1991)].

ISO 2719, *Petroleum products and lubricants — Determination of flash point — Pensky-Martens closed cup method* [Equivalent to BS EN 22719:1994].

ISO 3679, *Paints, varnishes, petroleum and related products — Determination of flash point — Rapid equilibrium method*.

ISO 3680, *Test for flash/no flash (rapid equilibrium method)* [Equivalent to BS 3900-A13:1986 (1991)].

3 Definitions

For the purposes of this British Standard the definitions given in BS 1846-1 apply together with the following:

3.1

consumer package

the individual packaging unit, as purchased by the consumer, which can normally contain several individual firelighters

3.2

outer case

the packaging unit, as supplied to the wholesaler or retailer, that normally contains several individual consumer packages

4 Performance

4.1 Burning characteristics

When tested in accordance with the test method described in Annex A the firelighter shall ignite readily after application of a naked flame to a broken edge or corner. Once ignited the firelighter shall burn steadily, without flaring, sudden deflagrations, sparking, spitting, popping, dripping, explosion or loss of integrity until the firelighter is totally consumed.

4.2 Ignition time

When tested in accordance with the test method described in Annex B the mean time taken from initial ignition of the firelighter to achieving a radiation intensity of 315 W/m² from the fire shall not exceed 60 minutes.

5 Safety

5.1 Flash point

When determined in accordance with the test method described in Annex C, the flash point of any liquid fuel constituent of the firelighter shall be greater than or equal to 38 °C.

5.2 Firelighter Composition

5.2.1 The firelighter shall not contain any substance or preparation classified as very toxic, toxic, corrosive, explosive, oxidizing, sensitizing or class 1 or 2 carcinogen in accordance with the Classification, Packaging & Labelling of Dangerous Preparations Directive 88/379/EEC of 7th June 1988.

5.2.2 When determined in accordance with the appropriate test method specified in BS 2000 the properties of any liquid fuel constituent used in the preparation of the firelighter shall conform to the following.

- a) Aromatic content ≤ 25 % (m/m) determined in accordance with BS 2000-156:1997.
- b) Sulfur content ≤ 0.2 % (m/m) determined in accordance with BS 2000-107:1993.
- c) Smoke point ≥ 20 mm determined in accordance with BS 2000-57:1995.

6 Consumer Packaging

6.1 The firelighter shall be packaged in such a way as to contain the product, protect it against environmental pollution, ensure safe handling, storage and transportation and ensure the safety of the consumer.

6.2 When tested in accordance with the test method specified in Annex D the consumer package shall maintain its integrity, quality of sealing, freedom from stains and dryness.

7 Product Marking

The consumer package shall be clearly marked with the following:

- a) the number and date of this British Standard, i.e. BS 7952:2000¹⁾;
- b) the manufacturer's or supplier's name and address;
- c) the product description and intended use;
- d) instructions for the safe storage and use of the firelighters;
- e) instructions to ensure the environmentally responsible and safe disposal of any unused product and/or packaging;
- f) risk and safety phrases;
- g) warnings and hazard symbols;
- h) product coding, indicating traceability of goods.

NOTE 1 It is essential that warnings and hazard symbols should be in accordance with the Classification, Packaging & Labelling of Dangerous Preparations Directive 88/379/EEC of 7th June 1988.

NOTE 2 It is recommended that the user should be advised not to dispose of any consumer packaging that contains any marking, warning or instructions until all the firelighters have been used and that a list of the constituents of the firelighter should be indicated on the packaging.

¹⁾ Marking BS 7952:2000 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is solely the claimant's responsibility. Such a declaration is not to be confused with third-party certification of conformity.