

Specification for portable fire extinguishers for use on cooking oil fires (class F)

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The preparation of this British Standard was entrusted by Technical Committee FSH/2, Fire extinguishers, to Subcommittee FSH/2/11, Portable fire extinguishers (manufacture), upon which the following bodies were represented:

- British Compressed Gases Association
- British Fire Consortium
- Buying Agency
- Chief and Assistant Chief Fire Officers
- Consumer Policy Committee of BSI
- Department of the Environment, Transport and the Regions — (Central Transport Group)
- Department of the Environment, Transport and the Regions — (Highways Agency)
- Fire Extinguishing Trades Association
- Home Office
- Institute of Petroleum
- London Fire and Civil Defence Authority
- Loss Prevention Council
- Loss Prevention Certification Board
- Nationwide Fire Services
- Society of Chemical Industry
- Society of Motor Manufacturers and Traders

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Foreword

This British Standard has been prepared by Technical Committee FSH/2/11. It specifies additional requirements for extinguishers to those of BS EN 3-1 to 6 and the requirements of BS EN 3-1 to 6 which are not applicable.

BS EN 3 only allows extinguishers with nominal charges of 1 kg, 2 kg, 3 kg, 4 kg, 6 kg, 9 kg, 12 kg, 2 l, 3 l, 6 l and 9 l. However, for the purposes of this standard, extinguishers with other nominal charges are permitted.

Annexes A, B, C and E are normative. Annex D is informative.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 9 and a back cover.

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1 Scope

This British Standard specifies requirements for portable fire extinguishers to be used on class F fires in cooking appliances that involve cooking media (vegetable or animal oils and fats).

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions 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 381C:1996, *Specification for colours for identification, coding and special purposes*.

BS EN 2, *Classification of fires*.

BS EN 3-1:1996, *Portable fire extinguishers — Part 1: Description, duration of operation, class A and B fire test*.

BS EN 3-2:1996, *Portable fire extinguishers — Part 2: Tightness, dielectric test, tamping test, special provisions*.

BS EN 3-3:1996, *Portable fire extinguishers — Part 3: Construction, resistance to pressure, mechanical tests*.

BS EN 3-4:1996, *Portable fire extinguishers — Part 4: Charges, minimum required fire*.

BS EN 3-5:1996, *Portable fire extinguishers — Part 5: Specification and supplementary tests*.

BS EN 3-6:1996, *Portable fire extinguishers — Part 6: Provisions for the attestation of conformity of portable fire extinguishers in accordance with EN 3 Part 1 to Part 5*.

3 Terms and definitions

For the purpose of this British Standard, the terms and definitions given in BS EN 2 and BS EN 3-1 to 6 and the following apply.

3.1

class F fire

fire in cooking appliance that involves combustible cooking media (vegetable or animal oils and fats)

3.2

wet chemical

extinguishing medium which includes, but is not limited to, aqueous solutions of potassium acetate, potassium carbonate, potassium citrate or combinations of these materials

3.3

powder

extinguishing medium capable of fluidization

3.4

auto-ignition

non-piloted initiation of combustion caused solely by the elevation in temperature of the material

3.5

non-piloted ignition

ignition without the application of direct heat to the vapour emission of a material

3.6

pre-burn time

designated period which follows ignition during which time combustion can stabilize throughout the material

3.7

range of discharge

distance from the nozzle to the point on the ground beyond which 50 % of the discharge falls for water based extinguishers

4 Extinguisher types

Portable fire extinguishers for use on cooking oil fires shall be one of the following types, described by the type of extinguishing medium they contain:

- a) water based, including foam and wet chemical;
- b) powder type extinguishers;
- c) carbon dioxide type extinguishers;
- d) halogenated hydrocarbon type extinguishers;
- e) clean agent extinguishers.

Where water based models are produced with or without freezing point depressant, they shall be treated as separate and distinct models for the purposes of range of operating temperatures, electrical conductivity and fire rating tests.

NOTE Other assessments relating to the design and construction of the product may be cross referred where possible.

5 General requirements

Portable fire extinguishers for use on cooking oil fires shall conform to the requirements of this standard and BS EN 3 with the exception of the clauses given in Table 1.