

BS 6165:2019



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## **Specification for small disposable fire extinguishers of the aerosol type**

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### Summary of pages

This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 26, an inside back cover and a back cover.

# Foreword

## Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 28 February 2019. It was prepared by Technical Committee FSH/2, *Fire extinguishers*. A list of organizations represented on this committee can be obtained on request to its secretary.

## Supersession

This British Standard supersedes BS 6165:2002, which is withdrawn.

## Information about this document

This British Standard has been prepared under the direction of the Fire Standards Policy Committee and specifies requirements for non-refillable fire extinguishers of the aerosol type for various applications.

It is recognized that small disposable non-refillable fire extinguishers can be exposed to more severe environmental conditions and are required to maintain their performance for longer periods than other aerosol dispensers. For example, they can be installed in cars or other vehicles where they might be repeatedly exposed to higher than normal temperatures for up to five years. For these reasons, the requirements of this standard for the strength and pressure resistance of the extinguisher bodies are more stringent than those specified for the otherwise similar aerosol containers in EC Directive 75/324/EEC of 20 May 1975 [\[1\]](#).

This British Standard has been written with the aim of producing a specification for small disposable fire extinguishers for various applications with an acceptable minimum level of performance. This type of extinguisher is intended for use only in situations where fires of limited proportions are anticipated because of the nature of some process or activity where the possibility of fire spreading to other materials is remote, or where people are present at the likely times of risk. This standard therefore is unlikely to meet the requirements of the various specifying authorities for more comprehensive protection. These extinguishers are not intended to supplant the performance of extinguishers that comply with the requirements, which are still to be regarded as the principal type to meet the needs of various authorities.

In order to minimize hindrance to developments in design, the general emphasis is on performance requirements rather than on dimensional requirements.

Clean agents for use with small portable extinguishers are not yet proven and are not therefore included in this standard but will be covered by an amendment when necessary.

Attention is drawn to the fact that many countries have statutory regulations concerning aerosol dispensers with which exporters to these countries have to comply. It is not practicable to give such details in a British Standard, and the user of this standard, in the UK, can seek the advice of the Department of Trade or, outside the UK, the Commercial Attaché or Consulate of the country concerned.

[Annex A](#) to [Annex J](#) are normative.

Note that 1 bar = 0.1 MPa in SI units.

## **Presentational conventions**

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause G.1.1, which states, “Requirements should be expressed using wording such as: ‘When tested as described in [Annex A](#), the product shall ...’”. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

## **Contractual and legal considerations**

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

### **Compliance with a British Standard does not of itself confer immunity from legal obligations.**

Particular attention is drawn to the following specific regulations:

- EC Directive 75/324/EEC of 20 May 1975 on Approximation of Aerosol Dispensers [\[1\]](#); and
- EC Directive 2008/47/EC [\[2\]](#)

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## 1 Scope

This British Standard specifies performance requirements for, and the maximum capacity of, small disposable fire extinguishers of the aerosol type with metal bodies. This standard covers aerosol extinguishers for various applications, including but not limited to, usage in cars, motor homes, etc. These aerosol extinguishers can contain powder, water-based media or an alternative media.

Requirements are specified for minimum performance in extinguishing test fires of Class A, B and F as defined in BS EN 2.

[Annex A](#) gives the conditioning treatment to be applied to extinguishers prior to testing as described in [Annex B](#) to [Annex I](#). [Annex J](#) gives the use code symbols to be used.

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## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions 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.

BS 7863, *Recommendations for colour coding to indicate the extinguishing media contained in portable fire extinguishers*

BS EN 615, *Fire protection — Fire extinguishing media — Specifications for powders (other than class D powders)*

BS ISO 3951-1, *Sampling procedures for inspection by variables — Part 1: Specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection for a single quality characteristic and a single AQL*

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## 3 Terms and definitions

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

### 3.1 aerosol

dispensing container with a valve, holding a product that is kept under greater than atmospheric pressure by means of propellant (liquefied, compressed or dissolved gas or combination of such gases) and that is discharged when the valve is operated

*NOTE This definition is used in the packaging industry and is in popular usage for consumer products. Scientifically, the term aerosol is defined as “a suspension of solid or liquid particles in a gas”. To avoid confusion, this British Standard avoids the use of the term “aerosol” as a noun and uses only the term “fire extinguisher of the aerosol type”.*

### 3.2 batch

definite quantity of some commodity or service produced at one time under conditions that are presumed uniform

*NOTE The circumstances under which the conditions can be presumed cannot be generally stated, for example, a change in the material or tool used in an interruption in the manufacturing process can give rise to different conditions (see BS ISO 3534-2).*