

Fireworks —

Part 1: Classification of fireworks

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Chemicals Standards Committee (CIC/-) to Technical Committee CIC/47, upon which the following bodies were represented:

- British Pyrotechnists' Association
- British Toy and Hobby Manufacturers' Association Ltd.
- Chief and Assistant Chief Fire Officers' Association
- Child Accident Prevention Trust
- Confederation of British Industry
- Consumer Policy Committee of BSI
- Department of Trade and Industry (Consumer Safety Unit, CA Division)
- Health and Safety Executive
- Home Office
- Institute of Explosives Engineers
- Institute of Trading Standards Administration
- Loss Prevention Council
- National Association of Toy Distributors
- National Association of Toy Retailers
- Royal Society for the Prevention of Accidents
- Scout Association

This British Standard, having been prepared under the direction of the Chemicals Standards Committee, was published under the authority of the Board of BSI and comes into effect on 30 November 1988

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Classification	3
Appendix A Index to terms defined in clause 2	6
Appendix B Explanatory notes on categories 1, 2 and 3	6
Appendix C Information and guidance on the classification and marking of category 4 fireworks	6
Table 1 — Category 1 fireworks	3
Table 2 — Category 2 fireworks	4
Table 3 — Category 3 fireworks	5
Table 4 — Category 4 fireworks	7
Publications referred to	Inside back cover

Foreword

This Part of BS 7114 has been prepared under the direction of the Chemicals Standards Committee.

BS 7114 has been prepared in order to specify certain basic requirements for the construction and performance of fireworks (as well as describing an associated classification system and methods of test) which will help to ensure that the risks of injury to users, onlookers and the public in general and of damage to property are minimized. It also includes requirements for labelling in order to encourage the proper use of fireworks. Prior to the publication of BS 7114 there had been no comprehensive document published in the United Kingdom concerned with the quality of fireworks, although fireworks are subject to certain legislation, notably the Explosives Act 1875 and the Fireworks Act 1951, and to voluntary agreements between Government departments and the industry.

BS 7114 is issued in three Parts as follows:

- *Part 1: Classification of fireworks;*
- *Part 2: Specification for fireworks;*
- *Part 3: Methods of test for fireworks.*

The main purpose of this Part of BS 7114 is to provide the classification of fireworks which is used as the basis of the requirements specified in Part 2 and the methods of test described in Part 3. It also defines various terms which appear in one or more of the Parts of BS 7114.

Attention is drawn to the United Nations classification scheme, published in the “Recommendations on the Transport of Dangerous Goods”, in which products as packaged for transport are assigned to a class and division dependent on the hazard they present.

Information and guidance on the classification and marking of fireworks which are outside the scopes of BS 7114-2 and BS 7114-3 are given in Appendix C.

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 a British Standard does not of itself confer immunity from legal obligations. In particular, attention is drawn to the Explosives Act 1875 and Order in Council 15, the Explosives Act 1923, the Fireworks Act 1951, the Health and Safety at Work etc. Act 1974 and the Consumer Protection Act 1987.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This Part of BS 7114 establishes a system for the classification of fireworks. It also defines various terms used in BS 7114. It is applicable to fireworks for consumer use or public display, both indoors and outdoors.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of BS 7114 the following definitions apply.

NOTE An alphabetical index to these terms is given in Appendix A.

2.1

firework

a device containing explosive composition which, upon functioning, will burn and/or explode to produce a visual or aural effect, or a combination of such effects, intended as a form of entertainment

NOTE Specialized technical devices such as signal flares, military devices and many theatrical devices are excluded by this definition.

2.2

explosive composition

a substance or mixture of substances which is designed, on ignition or initiation, to produce an aural and/or visual effect and/or to evolve gas

2.3

fuse

a component of a firework which is intended to transmit ignition from one part of a firework to another, with or without a delay

2.4

initial fuse

a fuse which is ignited in order to start the firework functioning

2.5

firework case

a container which is designed to retain all the explosive composition of a firework excluding the initial fuse

2.6

end closure

a disc, plate, plug or crimp which is designed to seal one end of a firework case

2.7

pyrotechnic unit

a discrete unit which is assembled into a firework case and which, upon functioning, will burn or explode to produce a visual and/or aural effect as part of a combination of effects produced by the firework

2.8

propellant charge

explosive composition which will burn to evolve gas which, in turn, is intended to propel the firework as a whole or to expel one or more pyrotechnic units without bursting the firework case

2.9

burster

explosive composition which will burn to evolve gas which in turn is intended to burst open the firework case, in order to expel one or more pyrotechnic units

2.10

gunpowder

explosive composition which is an intimate mixture of carbon and either potassium nitrate or sodium nitrate, or a similar mixture also containing sulphur

2.11

net explosive content

the mass of explosive composition in the firework

2.12

functioning point

the position in the test area where the firework is placed at the beginning of a performance test

2.13

principal effect

any of the effects listed in this Part of BS 7114 for the particular type of firework

2.14

first principal effect

the principal effect of a firework which is the first actually to occur during the functioning of the firework

2.15

initial fuse burning

burning which immediately follows ignition and precedes any other effect

2.16

invisible burning

burning occurring within the firework which is not visible to the person who ignited the firework