

Specification for

Flammability performance of fabrics and fabric combinations used in nightwear garments

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Textiles and Clothing Standards Policy Committee (TCM/-) to Technical Committee TCM/60, upon which the following bodies were represented:

- Association for Consumer Research (ACRE)
- Association of Consulting Scientists
- British Burn Association
- British Clothing Industry Association
- British Nonwovens Manufacturers' Association
- British Retailers' Association
- British Textile Confederation
- British Textile Technology Group
- Chemical Industries' Association
- Co-operative Union
- Consumer Policy Committee of BSI
- Department of Health
- Department of Trade and Industry (Consumer Safety Unit, CA Division)
- Home Office
- Institute of Trading Standards Administration
- International Wool Secretariat
- London Scientific Services
- Mail Order Traders' Association
- Medical Research Council
- National Children's Wear Association
- Textile Finishers' Association
- Textile Institute
- Textile Research Council (FCRA)

This British Standard, having been prepared under the direction of the Textiles and Clothing Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 28 June 1991

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Foreword

This British Standard, prepared under the direction of the Textiles and Clothing Standards Policy Committee revises and supersedes BS 5722:1984, which remains current pending changes in legislation. It is expected that this edition of BS 5722 will be referred to by amendment to the Nightwear (Safety) Regulations 1985 enabling the 1984 edition to be withdrawn.

NOTE Upon publication of this revision, BSI Sales Department will respond to purchase orders for BS 5722 by supplying copies of the 1991 edition. Copies of the 1984 edition may be obtained by quoting the number "BS 5722/84".

The scope of BS 5722:1979 specified performance requirements for sleepwear fabrics and BS 5722:1984 extended the scope to include fabrics for dressing gowns. It was stressed in these editions that the requirements applied to fabrics only and should not be used in the description of garments made from these fabrics. It was also pointed out that the use of trims, accessories and sewing threads can have an adverse effect on the flammability of garments. Provisions were made for testing several layers but not for testing other specific features of garment construction.

The present revision has been prepared following publication of a revised version of BS 5438. The new test method now provides facilities for testing fabric and garment specimens by both face and bottom edge ignition using equipment which is also specified in ISO 6941.

The following major changes have been made in this revision.

- a) The term fabric combination has been introduced in order to avoid the confusion which has arisen because the term fabric assembly was defined differently in the Nightwear (Safety) Regulations 1985, from the definition used in BS 5438.
- b) Standardized sampling and testing procedures have been specified for fabric combinations taken from garments. The igniting flame is applied to the face, immediately above the bottom edge, of a specimen which incorporates certain garment features, e.g. side seams, bottom hem and sleeves.
- c) Test results are expressed in terms of combined flammability/durability indices which indicate whether the fabric or the garment has been tested, the level of flammability performance achieved when tested by test 2A or test 3A of BS 5438 and the cleansing procedure in accordance with BS 5651 which has been employed.
- d) Three different levels of flammability performance are specified for both fabric and garment samples. For normal purposes level 3 is acceptable but it is possible to specify higher performance levels for specific high hazard situations.

As a result of all the changes it is now possible for a fabric or garment supplier to test his production in a standardized manner and to identify it as meeting certain performance levels. It is also possible for purchasers to specify which performance levels are acceptable to them.

It was originally intended to test certain specified garment features using the bottom edge ignition procedure of BS 5438:1989 but it was found that, because of the wide variability of garment specimens, it was not possible to apply the flame accurately and consistently to the bottom edge. The face ignition procedure is easier to apply and evaluates the performance of the specified garment features under the same ignition conditions as are used to evaluate the basic fabric.

Some garments include additional features which are not tested using the standard sampling plan. It is not easy to cover all the possible variations in garment design in a test procedure, however, guidance is provided on how such additional features might be tested.

The fabrics and garments covered by this standard are intended to give protection against rapid flame spread arising from accidental contact with small ignition sources. Attention is drawn to the importance of garment design in providing protection from flame. This topic is discussed in PD 2777 and Australian Standard AS 1249.

It is important to note that results obtained using test conditions specified in BS 5438, do not necessarily represent the behaviour of the test material under other conditions of test or use.

Attention is drawn to the Health and Safety at Work etc. Act 1974, and the need to ensure that the tests specified in this standard are carried out under suitable environmental conditions to provide adequate protection to personnel.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 6, 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.