

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2001.7—2005

Methods of test for textiles

Method 7: Quantitative analysis of fibre mixtures (BS 4407:1988, MOD)

RECONFIRMATION NOTICE

Technical Committee TX-020 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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NOTES

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Methods of test for textiles**Method 7: Quantitative analysis of fibre mixtures
(BS 4407:1988, MOD)**

PREFACE

This Standard was prepared by the Standards Australia Committee TX-020, Testing of Textiles to supersede the following series of test methods:

AS

2001	Methods of test for textiles
2001.7	Part 7: Quantitative analysis of fibre mixtures
2001.7.1—1983	Method 7.1: Test samples and test specimens
2001.7.2—1983	Method 7.2: General requirements
2001.7.3—1983	Method 7.3: Manual separation
2001.7.4—1983	Method 7.4: Binary mixture of acetate and certain other fibres (method using acetone)
2001.7.5—1983	Method 7.5: Binary mixtures of certain protein fibres (wool, animal hair, silk or protein) and certain other fibres (method using alkaline sodium hypochlorite)
2001.7.6—1983	Method 7.6: Binary mixtures of viscose, cupro or certain types of polynosic (modal) and cotton fibres (method using formic acid and zinc chloride)
2001.7.7—1983	Method 7.7: Binary mixtures of nylon 6 or nylon 6.6 and certain other fibres (method using formic acid 80% <i>m/m</i>)
2001.7.8—1983	Method 7.8: Binary mixtures of acetate and triacetate fibres (method using benzyl alcohol)
2001.7.9—1983	Method 7.9: Binary mixtures of triacetate and certain other fibres (method using dichloromethane)
2001.7.10—1983	Method 7.10: Binary mixtures of certain cellulose fibres and polyester (method using sulphuric acid 75% <i>m/m</i>)
2001.7.11—1983	Method 7.11: Binary mixtures of acrylics, certain modacrylics or certain chlorofibres (method using dimethylformide)
2001.7.12—1983	Method 7.12: Binary mixtures of chlorofibres and certain other fibres (method using carbon disulphide/acetone 55.5/44.5)
2001.7.13—1983	Method 7.13: Binary mixtures of acetate and certain chlorofibres (method using glacial acetic acid)
2001.7.14—1983	Method 7.14: Binary mixtures of silk and wool or hair fibres (method using sulphuric acid 75% <i>m/m</i>)
2001.7.15—1983	Method 7.15: Binary mixtures of certain cellulose fibres and wool or hair (method using sulphuric acid 70% <i>m/m</i>)
2001.7.16—1983	Method 7.16: Binary mixtures of jute and certain animal fibres (method of determining the nitrogen content)
2001.7.18—1983	Method 7.18: Binary mixtures of polyolefin and certain other fibres (method using xylene)
2001.7.19—1990	Method 7.19: Binary mixtures of chlorofibres (homopolymers of vinyl chloride) and certain other fibres (method using concentrated sulfuric acid)

2001.7.20—1983 Method 7.20: Binary mixtures of inorganic based, man-made fibres and certain fibres (method based on ignition at 625°C)

This Standard is an adoption with national modifications and has been reproduced from BS 4407:1988, *Methods for quantitative analysis of fibre mixtures* and its amendments, 6297:1990 and 9438:1997 which have been incorporated into the source document. The 1997 amendments are indicated by marginal bars.

The objective of this Standard is to provide manufacturers and testing bodies with a standard method for quantifying and identifying binary and ternary textile fibre mixtures.

For the purpose of this Standard, a supplementary method currently used in Australia, but not included in BS 4407, has been included as set out in Appendix ZZ. This method is for the determination of binary mixtures of cellulose and wool or hair fibres using sulphuric acid 70.6 m/m and is identified as Method 19.

As this Standard is reproduced from a British Standard, the following applies:

- (a) Its number appears on the cover and title page while the British Standard number appears only on the cover.
- (b) The source text 'this British Standard' should read 'this Australian Standard'.

None of the documents referenced in this Standard have been adopted as Australian Standards.

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Section 1. General

1 Scope

This British Standard describes methods for the quantitative analysis of textile fibre mixtures after identification of the fibre components of the mixture, including the composition of the individual yarns. Any non-fibrous matter is removed by a suitable pretreatment. If the fibre components do not form an intimate mixture and can be readily separated by hand, the analysis is carried out by the procedure given in section 3.

If part or the whole of the textile consists of an intimate mixture of two fibre types (binary mixture) one of the components is removed using a suitable method²⁾ following the appropriate procedure given in section 4, and the proportion of this component is calculated from the loss in mass. Wherever possible it is preferable to remove the fibre present in greater proportion, thus obtaining the fibre present in the smaller proportion as residue.

If part or the whole of the textile consists of an intimate mixture of three fibre types (ternary mixture) the above process is repeated using a second reagent. Suitable methods for the analysis of specific ternary mixtures are given in Appendix A.

NOTE 1 To obtain a reliable result, at least two determination should be made, either by manual separation or by chemical separation, if the results of duplicate tests differ by more than 2 %, two repeat determinations should be made.

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard the definition given in BS 4815 apply.

²⁾ Method 13 is an exception. It is based on a determination of the content of a constituent element of one of the two component