STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard METHODS OF TEST FOR TEXTILES

PART 7—QUANTITATIVE ANALYSIS OF FIBRE MIXTURES

AS 2001.7.2 GENERAL REQUIREMENTS

PREFACE

This standard is the basic reference document for a series of methods for the quantitative analysis of binary and ternary mixtures of fibres. As such, it groups and presents information common to the given test methods.

This method and the individual test methods to which it applies have been derived from BS 4407, Methods of Test: Quantitative Analysis of Fibre Mixtures. They take cognizance of ISO 1833—1977, Textiles—Binary Fibre Mixtures—Quantitative Chemical Analysis. Acknowledgement is made of the assistance obtained therefrom.

The methods assume that the test laboratory has an intimate knowledge of the processing history of the sample and can therefore apply appropriate pretreatment procedures prior to the commencement of the analysis.

It is recognized, however, that certain finishes and added matter cannot be completely removed by pretreatment and may interfere in the analyses.

In these cases, where details of processing history, particularly with reference to added matter, are unavailable, the test report requires the inclusion of a cautionary note of potential variation due to applied finish of an unknown nature.

METHOD

1 SCOPE. This standard sets out general requirements for methods for the quantitative analysis of binary and ternary textile fibre mixtures after identification of their individual components.

Appendix A lists the values of the allowances for moisture and other matter to be used in connection with the analysis specified.

The procedures to be followed for the analysis of ternary mixtures are tabulated in Table 1.

2 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 2001	Methods of Test for Textiles 2001.2.2 Part 2—Physical Tests—Determination of Corrected Invoice Mass of Textile Materials 2001.7.1 Part 7—Quantitative Analysis of Fibre Mixtures—Test Samples and Test Specimens
BS 1752	Laboratory Sintered or Frittered Filters
BS 2071	Soxhlet Extractors
BS 4407	Methods of Test. Quantitative Analysis of Fibre Mixtures

3 PRINCIPLE. After identification of the components of a mixture of fibres, one component is removed from a known dry mass and the residue determined. The mass of the component remaining is expressed as a percentage of the dry mass (duly adjusted for allowances) of the mixture and, for binary mixtures, the percentage of the other component determined by difference.

Should the mixture consist of more than two components, the procedure is repeated using the appropriate separation technique.

4 REAGENTS.

4.1 Reagents and Water. Unless otherwise specified, only reagents of the appropriate analytical reagent grade and only distilled water or water of equivalent purity shall be used. All reagents shall be freshly prepared.

4.2 Light Petroleum, redistilled within the boiling range of 40°C to 60°C.

4.3 Dichloromethane.

5 APPARATUS. The following apparatus is required:

(a) *Glass filter crucibles*, with sealed-in sintered disc filters of porosity grade 1 complying with BS 1752 and provided with either ground-glass stoppers or watch glass covers. Any other apparatus giving identical results may be used.

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