

Method for

The determination of wool fibre diameter by the airflow method

Co-operating organizations

The Textile Divisional Council, under whose supervision this British Standard was prepared, consists of representatives from the following Government department and scientific and industrial organizations:

- British Railways Board
- Consumer Council
- Cotton Industry Standards Committee
- Jute Industry Standards Committee
- Linen Industry Standards Committee
- London Transport Board
- Man-made Fibres Industry Standards Committee
- Ministry of Defence
- Ropes and Cordage Industry Standards Committee
- Silk Industry Standards Committee
- Society of Dyers and Colourists*
- Textile Institute*
- Textile Machinery Industry Standards Committee
- Trades Union Congress
- Wool Industry Standards Committee

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- British Jute Trade Research Association
- British Man-made Fibres Federation
- Committee of Directors of Textile Research Associations
- Commonwealth Joint Services Committee
- Cotton Silk and Man-made Fibres Research Association
- Hosiery and Allied Trades Research Association
- International Federation of Cotton and Allied Textile Industries
- Linen Industry Research Association

This British Standard, having been approved by the Textile Divisional Council, was published under the authority of the General Council on 16 October 1968

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First published December 1959
First revision October 1968

The following BSI references relate to the work on this standard:
Committee reference T/-/8
Draft for comment 67/15783

ISBN 580 00362 0

Amendments issued since publication

Amd. No.	Date of issue	Comments

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Foreword

This standard makes reference to the following British Standards:

BS 1051, *Terms relating to the conditioning of textiles and method for the determination of correct invoice weight.*

BS 2043, *Method for the determination of wool fibre fineness by the use of a projection microscope.*

This British Standard has been published by arrangement between the Textile Institute and the British Standards Institution. It was originally based on Tentative Textile Standard No. 51, which appeared in the Journal of the Textile Institute for July, 1958.

In the present revision all dimensions are in metric units, and certain other changes have been made to bring the method into line with current practice.

There is a close correlation between the air-permeability of a uniformly distributed mass of textile fibres and the specific surface area of the fibres. It is therefore possible to use air-permeability as a quick estimate of fibre fineness. For fibres of approximately circular cross section and constant overall density, such as unmedullated wool, the estimate of fineness gives the average fibre diameter, as determined by the projection microscope, with a good degree of accuracy.

The procedure described is in full conformity with Draft ISO Recommendation No. 1245, *“Permeability method for measuring the mean diameter of wool fibres”*.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, 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.