

BS EN 15930:2010



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Fibres — Elasticity of fibres — Test methods

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Fibres - Elasticité des fibres - Méthodes d'essais

Fasern - Elastizität von Fasern - Prüfung

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Foreword

This document (EN 15930:2010) has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2011, and conflicting national standards shall be withdrawn at the latest by March 2011.

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1 Scope

This test method covers the determination of the elasticity of fibres and may lead to classification of the fibre as elastic fibre (see Annex A).

It is applicable to single man-made crimped and uncrimped fibres.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12751, *Textiles — Sampling of fibres, yarns and fabrics for testing*

EN ISO 139, *Textiles — Standard atmospheres for conditioning and testing (ISO 139:2005)*

EN ISO 1973, *Textile fibres — Determination of linear density — Gravimetric method and vibroscope method (ISO 1973:1995)*

EN ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1:2004)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 elasticity

property of a fibre by virtue of which it tends to recover its original size and shape immediately after the removal of the force causing deformation

3.2 linear density

mass per unit length of an essentially linear structure

3.3 constant-rate-of-extension (CRE) testing machine

tensile testing machine provided with one clamp, which is virtually stationary, and another clamp, which moves with a constant speed throughout the test, the entire testing system being virtually free from deflection

3.4 gauge length

distance between the two effective clamping or holding points of a testing device

3.5 initial length

length of the test specimen between the two effective clamping or holding points at the required pretension, before testing