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Textiles — Manmade filament yarns — Determination of shrinkage in boiling water

Textiles — Fils de filaments synthétiques — Détermination du retrait dans l'eau bouillante

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

The committee responsible for this document is ISO/TC 38, *Textiles*, Subcommittee SC 23, *Fibres and yarns*.

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Textiles — Manmade filament yarns — Determination of shrinkage in boiling water

1 Scope

This International Standard specifies a test method for the determination of the boiling water shrinkage of non-textured and textured multifilament yarns (made of polyester, polyamide, polypropylene, cellulose fibre, etc.)

Only automatic method is specified in this International Standard.

This International Standard is applicable to manmade filament yarns of linear density less than 3 000 dtex.

This International Standard is not applicable to partially oriented yarns.

2 Normative references

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

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

3 Terms and definitions

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

3.1
shrinkage in boiling water
decrease in length of a specimen as a result of thermal treatment in boiling water, expressed as a percentage of its original length, which measured under tension before and after treatment

4 Principle

Under specific condition, a test specimen is treated in boiling water. Shrinkage is calculated as variation in length, measured before and after treatment.

5 Apparatus and materials

5.1 Skein winding reel

a) Reel with a circumference of (1 000 ± 2,5) mm, driven either automatically or manually.

b) A traversing mechanism to avert overlapping while a number of skeins being wound at the same time.

c) A tensioning device, to an accuracy of ±10 %, maintaining tension within the recommended limits.

d) A device to count the turns of the reel, preferably warning or stopping winding automatically, just prior to the specified number of reel revolutions.

e) A mechanism to reduce the reel circumference is advisable for easy removal of the skein.

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