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**Textiles — Quantitative chemical  
analysis —**

**Part 4:  
Mixtures of certain protein fibres with  
certain other fibres (method using  
hypochlorite)**

*Textiles — Analyse chimique quantitative —*

*Partie 4: Mélanges de certaines fibres protéiniques avec certaines  
autres fibres (méthode à l'hypochlorite)*



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 38, *Textiles*.

This second edition cancels and replaces the first edition (ISO 1833-4:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the title was changed from “Mixtures of certain protein **and** certain other fibres...” to “Mixtures of certain protein fibres **with** certain other fibres ...”;
- in [Clause 1](#), some remaining fibres were added to the list of fibres;
- a new [Clause 3](#) (Terms and definitions) was added as set out in the ISO/IEC Directives Part 2, 2016;
- in [5.1.2](#) (former 4.2), a sentence related to the comparison of the 2 possible reagents was introduced;
- in [Clause 7](#) (former Clause 6), a warning sentence related to the water bath temperature was introduced;
- in [Clause 8](#) (former Clause 7), “melamine” was added;
- in [Clause 9](#) (former Clause 8), “percentage point” was added to avoid confusion.

A list of all parts in the ISO 1833 series can be found on the ISO website.

# Textiles — Quantitative chemical analysis —

## Part 4:

## Mixtures of certain protein fibres with certain other fibres (method using hypochlorite)

### 1 Scope

This document specifies a method, using hypochlorite, to determine the mass percentage of protein fibre, after removal of non-fibrous matter, in textiles made of mixtures of certain non-protein fibres and certain protein fibres, as follows:

- wool, other animal-hair (such as cashmere, mohair), silk, protein,  
with
- cotton, cupro, viscose, modal, acrylic, chlorofibres, polyamide, polyester, polypropylene, glass, elastane, elastomultiester, elastolefin, melamine and polypropylene/polyamide bicomponent.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 1833-1, *Textiles — Quantitative chemical analysis — Part 1: General principles of testing*

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 4 Principle

The protein fibre is dissolved out from a known dry mass of the mixture with alkaline hypochlorite. The residue is collected, washed, dried and weighed; its mass, corrected if necessary, is expressed as a percentage of the dry mass of the mixture. The percentage of protein fibre is found by the difference.

### 5 Reagents

Use the reagents described in ISO 1833-1 together with those given in [5.1](#), [5.2](#) and [5.3](#).