Textiles - Quantitative chemical analysis - Part 18: Mixtures of silk with other protein fibres (method using sulfuric acid) (ISO 1833-18:2019)

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EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
See Eesti standard EVS-EN ISO 1833-18:2019 sisaldab Euroopa standardi EN ISO 1833-18:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 1833-18:2019 consists of the English text of the European standard EN ISO 1833-18:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.05.2019.	Date of Availability of the European standard is 15.05.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Textiles - Quantitative chemical analysis - Part 18: Mixtures of silk with other protein fibres (method using sulfuric acid) (ISO 1833-18:2019)

Textiles - Analyse chimique quantitative - Partie 18: Mélanges de soie avec d'autres fibres protéiques (méthode à l'acide sulfurique) (ISO 1833-18:2019)

Textilien - Quantitative chemische Analysen - Teil 18: Mischungen aus Seide mit anderen Proteinfasern (Schwefelsäure-Verfahren) (ISO 1833-18:2019)

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European foreword

This document (EN ISO 1833-18:2019) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with 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of an identical text or by endorsement, at the latest by November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 1833-18:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 1833-18:2019 has been approved by CEN as EN ISO 1833-18:2019 without any modification.

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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).

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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.

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

This second edition cancels and replaces the first edition (ISO 1833-18:2006), which has been technically revised. The main changes compared to the previous editions are as follows:

— the title has been changed from "Mixtures of silk and wool or hair…" to "Mixtures of silk with other protein fibres…";

— in Clause 1, "wool and animal hair" have been replaced by "other protein fibres (e.g. wool or animal hair)";

— the mandatory Clause 3 "Terms and definitions" has been added and the subsequent clauses have been renumbered;

— in Clause 8 (former Clause 7), "percentage point" has been added to avoid confusion.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Textiles — Quantitative chemical analysis —

Part 18: Mixtures of silk with other protein fibres (method using sulfuric acid)

1 Scope

This document specifies a method, using sulfuric acid, to determine the mass percentage of silk, after removal of non-fibrous matter, in textiles made of binary mixtures of

— silk

with

— other protein fibres (e.g. wool or animal hair).

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 silk fibre is dissolved from a known dry mass of the mixture with 75 % (mass fraction) sulfuric acid[1)]. 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 silk 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.

5.1 Sulfuric acid, 75 % (mass fraction).

While cooling, carefully add 700 ml of concentrated sulfuric acid (ρ = 1,84 g/ml at 20 °C) to 350 ml of water. After cooling this solution to room temperature, dilute it to 1 l with water. The concentration is not critical within the range 73 % to 77 % (mass fraction) sulfuric acid.

1) Wild silk, such as tussah silk, are not completely soluble in 75 % (mass fraction) sulfuric acid.

