

STN	Textílie Kvantitatívna chemická analýza Časť 27: Zmesi celulózových vlákien s určitými ďalšími vláknami (metóda používajúca síran hlinitý) (ISO 1833-27: 2018)	STN EN ISO 1833-27 80 8615
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Textiles - Quantitative chemical analysis - Part 27: Mixtures of cellulose fibres with certain other fibres (method using aluminium sulfate)
(ISO 1833-27:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Textiles - Quantitative chemical analysis - Part 27:
Mixtures of cellulose fibres with certain other fibres
(method using aluminium sulfate) (ISO 1833-27:2018)

Textiles - Analyse chimique quantitative - Partie 27:
Mélanges de fibres cellulosiques avec certaines autres
fibres (méthode au sulfate d'aluminium) (ISO 1833-
27:2018)

Textilien - Quantitative chemische Analyse - Teil 27:
Mischungen von Cellulosefasern mit bestimmten
anderen Fasern (Verfahren mit Aluminiumsulfat) (ISO
1833-27:2018)

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European foreword

The text of ISO 1833-27:2018 has been prepared by Technical Committee ISO/TC 38 "Textiles" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 1833-27:2019 by Technical Committee CEN/TC 248 "Textiles and textile products" the secretariat of which is held by BSI.

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

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.

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

Introduction

There are several kinds of test methods to determine the composition of fibre mixtures which include manual separation, chemical and microscopical methods. Chemical methods (selective dissolution method) for the analysis of fibre composition are applicable to most of the textile products. The procedure of such test method is that a component is dissolved out by chemical solvents, and then the insoluble residue is weighed. Caution should be exercised in handling chemical solvents such as sulfuric acid (70 %), hydrochloric acid (20 %) and dimethylformamide, etc. These solvents are hazardous and not easy to handle.

An alternative test method can be an eco-friendly and safer test method due to using non-hazardous chemicals. For the mixture of cellulose fibres and some other fibres, cellulose fibre is degraded through carbonization by a small amount of acid and heat treatment, and the residue remains without damage. Environmental condition and safety in the testing room can be improved by this test method.

Textiles — Quantitative chemical analysis —

Part 27:

Mixtures of cellulose fibres with certain other fibres (method using aluminium sulfate)

WARNING — This document calls for the use of substances/procedures that may be injurious to the health/environment if appropriate conditions are not observed. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety/environment at any stage.

1 Scope

This document specifies a method, using aluminium sulfate, to determine the mass percentage of cellulose fibres, after removal of non-fibrous matter, in textiles made of mixtures of

- cellulose fibres (natural or regenerated)
with
- polyester, polyamide, acrylic, wool and elastane fibres.

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 1833-1:2006, *Textiles — Quantitative chemical analysis — Part 1: General principles of testing*

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