

**Textiles - Quantitative chemical analysis - Part 11:  
Mixtures of cellulose and polyester fibres (method using  
sulfuric acid)**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 1833-11:2010 sisaldab Euroopa standardi EN ISO 1833-11:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.10.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 13.10.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 1833-11:2010 consists of the English text of the European standard EN ISO 1833-11:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.10.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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English Version

**Textiles - Quantitative chemical analysis - Part 11: Mixtures of  
cellulose and polyester fibres (method using sulfuric acid) (ISO  
1833-11:2006)**

Textiles - Analyse chimique quantitative - Partie 11:  
Mélanges de fibres de cellulose et de polyester (méthode à  
l'acide sulfurique) (ISO 1833-11:2006)

Textilien - Quantitative chemische Analysen - Teil 11:  
Mischungen aus Cellulose- und Polyesterfasern  
(Schwefelsäure-Verfahren) (ISO 1833-11:2006)

This European Standard was approved by CEN on 12 September 2010.

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## Foreword

The text of ISO 1833-11:2006 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 1833-11:2010 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of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

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### Endorsement notice

The text of ISO 1833-11:2006 has been approved by CEN as EN ISO 1833-11:2010 without any modification.

# Textiles — Quantitative chemical analysis —

## Part 11:

## Mixtures of cellulose and polyester fibres (method using sulfuric acid)

### 1 Scope

This part of ISO 1833 specifies a method, using sulfuric acid, to determine the proportion of cellulose fibre, after removal of non-fibrous matter, in textiles made of mixtures of

- natural and regenerated cellulose fibres
- and
- polyester fibre.

### 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.

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

### 3 Principle

The cellulose fibre is dissolved out from a known dry mass of the mixture, with 75 % (mass fraction) sulfuric acid. The residue is collected, washed, dried and weighed; its mass is expressed as a percentage of the dry mass of the mixture. The proportion of cellulose fibre is found by the difference.

### 4 Reagents

Use the reagents described in ISO 1833-1 together with those given in 4.1 and 4.2.

#### 4.1 Sulfuric acid, 75% (mass fraction).

A suitable reagent can be prepared by adding carefully, while cooling, 700 ml of concentrated sulfuric acid ( $\rho$  1,84 g/ml) to 350 ml of distilled water. After the solution has cooled 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.

#### 4.2 Ammonia, dilute solution.

Dilute 80 ml of concentrated ammonia solution ( $\rho$  0,880 g/ml) to 1 l with water.