## INTERNATIONAL STANDARD

ISO 1833-12

Second edition 2019-03

Textiles — Quantitative chemical analysis —

Part 12:

Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastane fibres with certain other fibres (method using dimethylformamide)

Textiles — Analyse chimique quantitative —

Partie 12: Mélanges d'acrylique, certains modacryliques, certaines chlorofibres, certains élasthannes avec certaines autres fibres (méthode au diméthylformamide)





© ISO 2019

olementation, no partanical, includir requested fr All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

| Co   | ontents                               | Page          |
|------|---------------------------------------|---------------|
| For  | Forewordi                             |               |
| 1    | Scope                                 | 1             |
| 2    | Normative references                  | 1             |
| 3    | Terms and definitions                 | 1             |
| 4    | Principle                             | 1             |
| 5    | Reagents                              | 2             |
| 6    | Apparatus                             | 2             |
| 7    | Test procedure                        | 2             |
| 8    | Calculation and expression of results | 2             |
| 9    | Precision                             |               |
| Bib  | liography                             | 3             |
|      |                                       |               |
|      |                                       |               |
|      | $\sim$                                |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      | <u></u>                               |               |
|      |                                       |               |
|      | 4                                     |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       | 40            |
|      |                                       | $O_{\lambda}$ |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
|      |                                       |               |
| 0.10 |                                       | •••           |

### 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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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

This second edition cancels and replaces the first edition (ISO 1833-12:2006), which has been technically revised. The main changes compared to the previous edition are as follows:

- the title has been changed from "Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastane fibres **and** certain other fibres..." to "Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastane fibres **with** certain other fibres";
- in <u>Clause 1</u>, some remaining fibres added, a precision about a possible preliminary test to check the solubility of the fibres in dimethylformamide and a reference to other possible methods have been added;
- <u>Clause 3</u> (Terms and definitions) has been added;
- in <u>Clause 5</u>, a precision has been added on the dimethylformamide used;
- in <u>Clause 7</u>, the initial quantity of dimethylformamide has been decreased at 100 mL, a precision on the intervals of shaking has been added, the method of washing has been changed;
- in Clause 8, a specific d factor for lyocell, elastomultiester and melamine has been added;
- in <u>Clause 9</u>, "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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Textiles — Quantitative chemical analysis —

### Part 12:

# Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastane fibres with certain other fibres (method using dimethylformamide)

### 1 Scope

This document specifies a method, using dimethylformamide, to determine the mass percentage of acrylic, modacrylic, chlorofibre or elastane, after removal of non-fibrous matter, in textiles made of mixtures of

acrylic, certain modacrylics, certain chlorofibres, certain elastane fibres

with

— wool, animal hair, silk, cotton, viscose, cupro, modal, lyocell, polyamide, polyester, elastomultiester, elastolefin, melamine, polyacrylate or glass fibres.

It is not applicable to animal hair, wool and silk dyed with chromium based mordant dyes.

NOTE Dyestuff identification is described in ISO 16373-1[3].

### 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 <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

### 4 Principle

The acrylic, modacrylic, chlorofibre or elastane is dissolved out from a known dry mass of the mixture, with dimethylformamide at 90 °C to 95 °C. 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, and the percentage of acrylic, modacrylic, chlorofibre or elastane is found by the difference.

Where certain modacrylic fibres, certain chlorofibres or certain elastane fibres are present, a preliminary test shall be carried out to determine whether the fibre is completely soluble in the reagent.