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Textiles — Quantitative chemical analysis —

Part 10: Mixtures of triacetate or polylactide with certain other fibres (method using dichloromethane)

Textiles — Analyse chimique quantitative —
Partie 10: Mélanges de triacétate ou de polylactide avec certaines autres fibres (méthode au dichlorométhane)

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Foreword

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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).

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).

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 1833-10:2006) which has been technically revised.

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

— the title was changed from "Mixtures of triacetate or polylactide **and** certain other fibres…" to "Mixtures of triacetate or polylactide **with** certain other fibres…";

— in Clause 1, several remaining fibres have been added;

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

— in Clause 7 (former Clause 6), some precise details have been added in the test procedure;

— in Clause 8 (former Clause 7), a specific *d* factor for elastomultiester, elastolefin and melamine has been added;

— in Clause 9 (former Clause 8), "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 10: Mixtures of triacetate or polylactide with certain other fibres (method using dichloromethane)

1 Scope

This document specifies a method, using dichloromethane, to determine the mass percentage of triacetate or polylactide, after removal of non-fibrous matter, in textiles made of mixtures of

— triacetate or polylactide

with

— wool or other animal hair, silk, protein, cotton, viscose, cupro, modal,lyocell, polyamide, polyester, acrylic, elastomultiester, polypropylene, elastolefin, melamine, polypropylene/polyamide bicomponent,polyacrylate and glass fibres.

Triacetate fibres which have been partially hydrolysed (i.e. saponification) cease to be completely soluble in the reagent. In such cases, this method is not applicable.

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 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 triacetate or polylactide fibres are dissolved out from a known dry mass of the mixture, with dichloromethane. 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 triacetate or polylactide is found by the difference.

5 Reagents

Use the reagents described in ISO 1833-1 together with that given in 5.1.

5.1 Dichloromethane.

SAFETY PRECAUTIONS — The toxic effects of this reagent shall be borne in mind and full precautions shall be taken during use.

6 Apparatus

Use the apparatus described in ISO 1833-1 together with that given in 6.1.

6.1 Conical flask, minimum capacity 200 ml, glass-stoppered.

7 Test procedure

Follow the general procedure given in ISO 1833-1, and then proceed as follows.

To the specimen contained in the conical flask (6.1), add 100 ml of dichloromethane (5.1) per gram of specimen. Insert the stopper and shake the flask to wet out the specimen. Allow the flask to stand for 30 min at room temperature, shaking it at intervals of about 10 min.

Decant the liquid through the weighed filter crucible.

Add 60 ml of dichloromethane to the residue in the flask, shake it by hand, and filter the contents of the flask through the filter crucible. Transfer any residual fibres to the crucible by washing out the flask with a little more dichloromethane.

Drain the crucible using suction to remove excess liquid, refill the crucible with dichloromethane, and allow it to drain under gravity.

Finally, drain the crucible using suction. Rinse with hot water to eliminate all the solvent, dry the crucible and residue, then cool and weigh them.

8 Calculation and expression of results

Calculate the results as described in the general instructions of ISO 1833-1.

The value of d is 1,00 except for polyester elastomultiester, elastolefin and melamine fibre, for which d is 1,01.

In the case of triacetate that is not completely soluble in the reagent, the percentage of triacetate is calculated using a value of d is 1,02. The percentage of triacetate thus calculated should be deducted from 100 to give the percentage of the other fibre.

9 Precision

On a homogeneous mixture of textile materials, the confidence limits of the results obtained by this method are not greater than ±1 percentage point for the confidence level of 95 %.

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