BS EN ISO 14184-1:2011

BSI Standards Publication

Textiles — Determination of formaldehyde

Part 1: Free and hydrolised formaldehyde (water extraction method) (ISO 14184-1:2011)

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This British Standard is the UK implementation of EN ISO 14184-1:2011. It supersedes BS EN ISO 14184-1:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TCI/80, Chemical testing of textiles.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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English Version

Textiles - Determination of formaldehyde - Part 1: Free and hydrolised formaldehyde (water extraction method) (ISO 14184-1:2011)

Textiles - Dosage du formaldéhyde - Partie 1: Formaldéhyde libre et hydrolysé (méthode par extraction d'eau) (ISO 14184-1:2011)

Textilien - Bestimmung des Gehaltes an Formaldehyd - Teil 1: Freier und hydrolisierter Formaldehyd (Wasser-Extraktions-Verfahren) (ISO 14184-1:2011)

This European Standard was approved by CEN on 14 August 2011.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 14184-1:2011) 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of an identical text or by endorsement, at the latest by February 2012, and conflicting national standards shall be withdrawn at the latest by February 2012.

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

This document supersedes EN ISO 14184-1:1998.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 14184-1:2011 has been approved by CEN as a EN ISO 14184-1:2011 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 14184-1 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This second edition cancels and replaces the first edition (ISO 14184-1:1998), of which it constitutes a minor revision.

ISO 14184 consists of the following parts, under the general title *Textiles — Determination of formaldehyde*:

— *Part 1: Free and hydrolysed formaldehyde (water extraction method)*

— *Part 2: Released formaldehyde (vapour absorption method)*

Textiles — Determination of formaldehyde —

Part 1:
Free and hydrolysed formaldehyde (water extraction method)

WARNING — This part of ISO 14184 calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage. It has been assumed in the drafting of this part of ISO 14184 that the execution of its provisions is entrusted to appropriately qualified and experienced people.

1 Scope

This part of ISO 14184 specifies a method for determining the amount of free formaldehyde and formaldehyde extracted partly through hydrolysis by means of a water extraction method. The method can be applied to the testing of textile samples in any form.

The procedure is intended for use in the range of free and hydrolysed formaldehyde on the fabric between 16 mg/kg and 3 500 mg/kg when determined by this method. The lower limit is 16 mg/kg. Below this limit, the result is reported as “not detectable”.

A method for determination of released formaldehyde is given in ISO 14184-2.

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 139:2005, *Textiles — Standard atmospheres for conditioning and testing*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 4793:1980, *Laboratory sintered (fritted) filters — Porosity grading, classification and designation*

3 Principle

Formaldehyde is extracted from a textile sample with water at 40 °C. The amount of formaldehyde is then determined colorimetrically.

4 Reagents

All reagents shall be of analytical reagent quality.

4.1 **Distilled water** or **grade 3 water** complying with ISO 3696.