



BSI Standards Publication

## Textiles – Determination of pH of aqueous extract

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## National foreword

This British Standard is the UK implementation of EN ISO 3071:2020. It is identical to ISO 3071:2020. It supersedes BS EN ISO 3071:2006, which is withdrawn.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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Published by BSI Standards Limited 2020

ISBN 978 0 580 51741 9

ICS 59.080.01

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 February 2020.

### Amendments/corrigenda issued since publication

Date	Text affected
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EUROPEAN STANDARD

**EN ISO 3071**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2020

ICS 59.080.01

Supersedes EN ISO 3071:2006

English Version

## Textiles - Determination of pH of aqueous extract (ISO 3071:2020)

Textiles - Détermination du pH de  
l'extrait aqueux (ISO 3071:2020)

Textilien - Bestimmung des pH des  
wässrigen Extraktes (ISO 3071:2020)

This European Standard was approved by CEN on 7 January 2020.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (EN ISO 3071:2020) 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of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

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

This document supersedes EN ISO 3071:2006.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 3071:2020 has been approved by CEN as EN ISO 3071:2020 without any modification.

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Reagents</b> .....	<b>1</b>
<b>6 Apparatus</b> .....	<b>2</b>
<b>7 Preparation of test specimens</b> .....	<b>2</b>
<b>8 Procedure</b> .....	<b>2</b>
8.1 Preparation of the aqueous extract.....	<b>2</b>
8.2 Measurement of the pH of the aqueous extract.....	<b>2</b>
<b>9 Calculation</b> .....	<b>3</b>
<b>10 Precision</b> .....	<b>3</b>
<b>11 Test report</b> .....	<b>3</b>
<b>Annex A (informative) Preparation of standard buffer solutions</b> .....	<b>4</b>
<b>Bibliography</b> .....	<b>5</b>

## 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 [www.iso.org/directives](http://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](http://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 of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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

This fourth edition cancels and replaces the third edition (ISO 3071:2005), which has been technically revised.

The main change compared to the previous edition is as follows:

- in [Clause 7](#), only two test specimens are specified instead of three;
- in [8.1](#), water has been omitted as an extracting solution.

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](http://www.iso.org/members.html).

## Introduction

The pH-value of the aqueous extract of a textile affords a useful index to its processing history. In addition, it is becoming more common to demand that the textile, in its various forms, conforms to certain limits in respect of its acidity or alkalinity, often expressed in terms of the pH-value of the aqueous extract.

# Textiles – Determination of pH of aqueous extract

## 1 Scope

This document specifies a method for determining the pH of the aqueous extract of textiles. The method is applicable to textiles in any form (e.g. fibres, yarns, fabrics).

## 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 3696, *Water for analytical laboratory use — Specification and test methods*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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/>

### 3.1

#### pH

co-logarithm of the hydrogen ion concentration in an aqueous extract

## 4 Principle

The pH-value of an aqueous extract of a textile is measured electrometrically at room temperature by means of a glass electrode.

## 5 Reagents

All reagents used shall be of recognized analytical grade.

**5.1 Distilled or deionized water**, of at least grade 3 as defined in ISO 3696, having a pH between 5,0 and 7,5.

The pH shall be verified the first time the water is used. If it is not within the specified range, the water shall be redistilled using chemically resistant glassware. Acid or organic matter can be removed by distilling water from a solution of 1 g/l potassium permanganate and 4 g/l sodium hydroxide. Alkalinity (e.g. the presence of ammonia) can be removed by distilling the water from a solution of dilute sulfuric acid. If the distilled water is not grade 3, boil 100 ml of distilled water in a beaker at a moderate rate for  $(10 \pm 1)$  min and allow the covered beaker to cool to room temperature.

**5.2 Potassium chloride solution**, 0,1 mol/l, prepared using distilled or deionized water (5.1).