

Textiles - Determination of antibacterial activity of antibacterial finished products

Textiles - Determination of antibacterial activity of antibacterial finished products

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 20743:2007 sisaldab Euroopa standardi EN ISO 20743:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.07.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 20743:2007 consists of the English text of the European standard EN ISO 20743:2007.</p> <p>This document is endorsed on 27.07.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p>Käsitlusala:</p> <p>This International Standard specifies quantitative test methods to determine the antibacterial activity of antibacterial finished textile products including nonwovens.</p>	<p>Scope:</p> <p>This International Standard specifies quantitative test methods to determine the antibacterial activity of antibacterial finished textile products including nonwovens.</p>
---	---

ICS 07.100.99, 59.080.01

Võtmesõnad:

ICS 59.080.01; 07.100.99

English Version

**Textiles - Determination of antibacterial activity of antibacterial
finished products (ISO 20743:2007)**

Textiles - Détermination de l'activité antibactérienne des
produits finis antibactériens (ISO 20743:2007)

Textilien - Bestimmung der antibakteriellen Wirkung
antibakteriell behandelter Erzeugnisse (ISO 20743:2007)

This European Standard was approved by CEN on 16 May 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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 United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (prEN ISO 20743:2007) 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 December 2007, and conflicting national standards shall be withdrawn at the latest by December 2007.

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, 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 United Kingdom.

Endorsement notice

The text of ISO 20743:2007 has been approved by CEN as EN ISO 20743:2007 without any modifications.

**Textiles — Determination of antibacterial
activity of antibacterial finished products**

*Textiles — Détermination de l'activité antibactérienne des produits finis
antibactériens*



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Safety precaution.....	2
5 Apparatus.....	2
6 Reagents and culture media.....	4
7 Reference strains.....	8
7.1 Strains.....	8
7.2 Storage of strains.....	8
8 Quantitative measurement.....	10
8.1 Plate count method.....	10
8.2 Luminescence method.....	11
9 Shaking method.....	12
9.1 Shaking by vortex mixer.....	12
9.2 Shaking by hand.....	12
9.3 Shaking by Stomacher.....	12
10 Test procedures.....	12
10.1 Absorption method.....	12
10.2 Transfer method.....	17
10.3 Printing method.....	21
Bibliography.....	27

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 20743 was prepared by Technical Committee ISO/TC 38, *Textiles*.

Introduction

These test methods were established in order to address the substantial need for an International Standard to determine antibacterial activity for antibacterial finished textile products.

Textiles — Determination of antibacterial activity of antibacterial finished products

1 Scope

This International Standard specifies quantitative test methods to determine the antibacterial activity of antibacterial finished textile products including nonwovens.

This International Standard is applicable to all textile products, including cloth, wadding, thread and material for clothing, home furnishings and miscellaneous goods regardless of the type of antibacterial agent used (organic, inorganic, natural or man-made) or the method of application (built-in, after-treatment or grafting).

Based on the intended application and on the environment in which the textile product is to be used, the user can select the most suitable of the following three methods on determination of antibacterial activity:

- a) absorption method (an evaluation method in which test bacterial suspension is inoculated directly onto samples);
- b) transfer method (an evaluation method in which test bacteria are placed on an agar plate and transferred onto samples);
- c) printing method (an evaluation method in which test bacteria are placed on a filter and printed onto samples).

The colony plate count method and the ATP (ATP = Adenosine Tri-phosphate) luminescence method are also specified for measuring the enumeration of bacteria.

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 6330, *Textiles — Domestic washing and drying procedures for textile testing*

3 Terms and definitions

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

3.1

textile fabric

general term employed for designating textile surfaces, woven fabrics, knitted fabrics, etc., formed by the interlocking of textile materials having a certain cohesion and which are generally intended for clothing or furniture applications

NOTE Often includes certain types of nonwovens.