

Testing of textiles - Evaluation of the action of microfungi

Testing of textiles - Evaluation of the action of microfungi

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14119:2003 sisaldab Euroopa standardi EN 14119:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.10.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14119:2003 consists of the English text of the European standard EN 14119:2003.</p> <p>This document is endorsed on 14.10.2003 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>
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<p>Käsitlusala: This European Standard specifies methods for determining the resistance of textiles to the action of microfungi. The results of the tests are evaluated by visual examination and by measuring the physical properties of the textiles. These tests are applicable to all textile products, including cellulosic or man-made fibre textiles (see annex B)</p>	<p>Scope: This European Standard specifies methods for determining the resistance of textiles to the action of microfungi. The results of the tests are evaluated by visual examination and by measuring the physical properties of the textiles. These tests are applicable to all textile products, including cellulosic or man-made fibre textiles (see annex B)</p>
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Võtmesõnad: abbreviated description, damage, definitions, effects, fungal attack, microorganisms, pest control, pests, pretreatment, resistance, samples, specimen preparation, testing, textiles, watering

ICS 07.100.99; 59.080.30

English version

Testing of textiles - Evaluation of the action of microfungi

Essais sur les textiles - Evaluation de l'action des
champignons microscopiques

Prüfung von Textilien - Bestimmung der Einwirkung
mikroskopischer Pilze (Mikrofungi)

This European Standard was approved by CEN on 1 August 2003.

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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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 14119:2003) has been prepared by 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 March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

Annexes A and B are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Under certain climatic and environmental conditions microfungi can settle on and colonise the surface of textile products and can possibly deteriorate them.

The tests and test conditions specified in this standard are empirical and cover most - but not all - potential applications.

The actions of microfungi on textiles are quite different:

- a) Direct action: deterioration of the textile product which serve as a nutritive substance for the growth of the microfungi;
- b) Indirect action: influence of metabolic products of the microfungi, e.g. discolouration or biochemical deterioration.

This standard deals also with the combined action of these two processes.

This standard is based on a part of ISO 846:1997 "Plastics - Evaluation of the action of microorganisms" and IEC 68-2-10:1988 "Basic environmental testing procedures, Part 2: Test J, Mould growth".

1 Scope

This European Standard specifies methods for determining the resistance of textiles to the action of microfungi. The results of the tests are evaluated by visual examination and by measuring the physical properties of the textiles. These tests are applicable to all textile products, including cellulosic or man-made fibre textiles (see annex A).

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN ISO 13934-1, *Textiles - Tensile properties of fabrics - Part 1: Determination of maximum force and elongation at maximum force using the strip method (ISO 13934-1:1999)*.

3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply.

3.1

biodeterioration

change of chemical or physical properties of materials due to the action of (micro-) organisms

3.2

fungistatic effect

antimycotic effect of an antimicrobial treatment which prevents a given material from being overgrown by fungi under moist conditions

3.3

biodegradation

ultimate degradation / mineralization of organic matter under aerobic conditions into CO₂, water and microbial biomass

3.4

rotting

microbiogenous deterioration under moist or wet conditions, in contact with a microbiological active soil

4 Safety

Handling of microorganisms which are potentially hazardous requires a high degree of technical competence and can be subject to current national legislation and regulations. Only personnel trained in microbiological techniques should carry out such tests. Codes of practice for disinfection, sterilisation and personal hygiene shall be strictly observed.

NOTE It is recommended that workers should consult appendix A "Danger to personnel" of IEC 68-2-10 and ISO 7218 "Microbiology - General guidance for microbiological examinations".