



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 139:2005

# Textiles — Standard atmospheres for conditioning and testing

## I.S. EN ISO 139:2005

*Incorporating amendments/corrigenda/National Annexes issued since publication:*  
EN ISO 139:2005/A1:2011

### **The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:**

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i> EN 20139:1992	<i>This document is based on:</i> EN ISO 139:2005 EN 20139:1992	<i>Published:</i> 15 January, 2005 1 June, 1993
This document was published under the authority of the NSAI and comes into effect on: 11 March, 2005		ICS number: 59.080.01
<b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	<b>Sales:</b> T +353 1 857 6730 F +353 1 857 6729 W standards.ie
Údarás um Chaighdeáin Náisiúnta na hÉireann		

ICS 59.080.01

English Version

## Textiles - Standard atmospheres for conditioning and testing - Amendment 1 (ISO 139:2005/AMD 1:2011)

Textiles - Atmosphères normales de conditionnement et  
d'essai - Amendement 1 (ISO 139:2005/AMD 1:2011)

Textilien - Normalklimate für die Probenvorbereitung und  
Prüfung - Änderung 1 (ISO 139:2005/AMD 1:2011)

This amendment A1 modifies the European Standard EN ISO 139:2005; it was approved by CEN on 30 June 2011.

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

This amendment 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

## **Contents**

**Page**

<b>Foreword.....</b>	<b>3</b>
----------------------	----------

## **Foreword**

This document (EN ISO 139:2005/A1:2011) 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 Amendment to the European Standard EN ISO 139:2005 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2012, and conflicting national standards shall be withdrawn at the latest by January 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.

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 139:2005/AMD 1:2011 has been approved by CEN as a EN ISO 139:2005/A1:2011 without any modification.

English version

## Textiles - Standard atmospheres for conditioning and testing (ISO 139:2005)

Textiles - Atmosphères normales de conditionnement et  
d'essai (ISO 139:2005)

Textilien - Normalklimate für die Probenvorbereitung und  
Prüfung (ISO 139:2005)

This European Standard was approved by CEN on 10 December 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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

**I.S. EN ISO 139:2005**

**EN ISO 139:2005 (E)**

**Foreword**

This document (EN ISO 139:2005) 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 July 2005, and conflicting national standards shall be withdrawn at the latest by July 2005.

This document supersedes EN 20139:1992.

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

**Endorsement notice**

The text of ISO 139:2005 has been approved by CEN as EN ISO 139:2005 without any modifications.

**I.S. EN ISO 139:2005**  
**INTERNATIONAL**  
**STANDARD**

**ISO**  
**139**

Second edition  
2005-01-15

---

---

**Textiles — Standard atmospheres for  
conditioning and testing**

*Textiles — Atmosphères normales de conditionnement et d'essai*



Reference number  
ISO 139:2005(E)

© ISO 2005



**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.

© ISO 2005

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](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

Page

<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>3</b>	<b>Requirements .....</b>	<b>2</b>
<b>4</b>	<b>Apparatus .....</b>	<b>2</b>
<b>5</b>	<b>Procedures .....</b>	<b>2</b>
<b>6</b>	<b>Test report .....</b>	<b>3</b>
	<b>Annex A (normative) Control of standard atmosphere .....</b>	<b>4</b>
	<b>Annex B (informative) Tolerance zone .....</b>	<b>5</b>
	<b>Bibliography .....</b>	<b>6</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.

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 139 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 24, *Conditioning atmospheres and physical tests for textile fabrics*.

This second edition cancels and replaces the first edition (ISO 139:1973), which has been technically revised, specifically by including the allowances for the uncertainty of the measurement in the overall tolerances for temperature and relative humidity.

## **Introduction**

The tolerances for temperature and relative humidity given in ISO 139:1973 were the tolerances for the temperature and relative humidity measured in the laboratory, and without any consideration for the uncertainty of measurement of the measuring devices being used.

With the increased understanding since 1973 and the existence now of standards covering these issues (e.g. ISO 14253-1), it is now necessary to allow for the uncertainty of measurement when setting appropriate tolerances.

This second edition of ISO 139 includes the allowance for uncertainty of measurement in the overall tolerances for temperature and relative humidity.

This means that although the tolerances for temperature and relative humidity appear more lenient than in ISO 139:1973, in practice, the laboratory must still be controlled (measured temperature and humidity) to essentially the same level as stated in ISO 139:1973.

**I.S. EN ISO 139:2005**

# Textiles — Standard atmospheres for conditioning and testing

## 1 Scope

This International Standard defines the characteristics and use of a standard atmosphere for conditioning, for determining the physical and mechanical properties of textiles and a standard alternative atmosphere that may be used if agreed between parties.

## 2 Terms and definitions

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

### 2.1

#### **standard atmosphere**

environment of controlled relative humidity and temperature in which textiles are conditioned and tested

### 2.2

#### **relative humidity**

ratio, expressed as a percentage, of the actual pressure of the water vapour in the atmosphere to the saturation vapour pressure at the same temperature and at the same pressure

### 2.3

#### **tolerance**

difference between the upper and lower tolerance limits

[ISO 3534-2]

### 2.4

#### **tolerance zone**

variate values of the characteristics between and including the tolerance limits

[ISO 3534-2]

### 2.5

#### **tolerance limits**

specified values of the characteristic giving upper and/or lower bounds of the permissible value

[ISO 3534-2]

### 2.6

#### **uncertainty of measurement**

parameter, associated with the result of measurement, that characterizes the dispersion of the values that could reasonably be attributed to the measurand

NOTE Modified from VIM.

### 2.7

#### **resolution (of displaying device)**

smallest difference between indications of displaying that can be meaningfully distinguished

NOTE Modified from VIM.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-