



# SLOVENSKI STANDARD

## SIST EN 20139:1999

01-marec-1999

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### Tekstilije - Standardna atmosfera za kondicioniranje in preskušanje

Textiles - Standard atmospheres for conditioning and testing (ISO 139:1973)

Textilien - Normalklimate für die Probenvorbereitung und Prüfung (ISO 139:1973)

Textiles - Atmospheres normales de conditionnement et d'essai (ISO 139:1973)

Ta slovenski standard je istoveten z: EN 20139:1992

[SIST EN 20139:1999](https://standards.iteh.ai/catalog/standards/sist/499343c6-0dc0-4b63-b81b-bdc868309e/sist-en-20139-1999)

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#### **ICS:**

59.080.01	Tekstilije na splošno	Textiles in general
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**SIST EN 20139:1999**

**en**

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EUROPEAN STANDARD

EN 20139:1992

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 1992

UDC 677.074/077:677.01:620.193.21

Descriptors: Textiles, textile conditioning, standard atmosphere, specimen, preparation, testing conditions

English version

**Textiles - Standard atmospheres for conditioning  
and testing (ISO 139:1973)**Textiles - Atmosphères normales de  
conditionnement et d'essai (ISO 139:1973)Textilien - Normalklimate für die  
Probenvorbereitung und Prüfung (ISO 139:1973)**STANDARD PREVIEW**  
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This European Standard was approved by CEN on 1992-08-10. 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.

The European Standards exist 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CEN**European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

## Foreword

This European Standard has been taken over by CEN/TC 248 "Textiles and textile products" from the work of ISO/TC 38 "Textiles" of the International Organization for Standardization (ISO).

The document was submitted to the CEN members to the Unique Acceptance Procedure and was approved without any modification.

In the countries bound to implement this European Standard a national standard identical to this European Standard shall be published at the latest by 1993-02 and conflicting national standards shall be withdrawn at the latest by 1993-02.

Following the CEN/CENELEC Common Rules, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

## Endorsement notice

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The content of this European Standard is identical with that of the International Standard ISO 139 "Textiles - Standard atmospheres for conditioning and testing" published in 1973. Although this standard includes two standard atmospheres, for use in CEN countries, only the standard atmosphere of 65% relative humidity, 20°C, is applicable.

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# INTERNATIONAL STANDARD



# 139

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## Textiles — Standard atmospheres for conditioning and testing

First edition — 1973-09-15

**ITeh STANDARD PREVIEW**  
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UDC 677.01 : 551.58

Ref. No. ISO 139-1973 (E)

**Descriptors** : textiles, controlled atmospheres, standardized atmospheres, tests, testing conditions, preparation, treatment.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, International Standard ISO 139 replaces ISO Recommendation R 139-1967 drawn up by Technical Committee ISO/TC 38, *Textiles*.

SIST EN 20139:1999

The Member Bodies of the following countries approved the Recommendation :  
<https://standards.iteh.ai/catalog/standards/sist/499343c6-0dc0-4b63-b81b-bdc868309e/sist-en-20139-1999>

Australia	Germany	New Zealand
Austria	Greece	Norway
Belgium	Hungary	Pakistan
Bulgaria	India	Poland
Burma	Ireland	Romania
Chile	Israel	Spain
Czechoslovakia	Italy	Sweden
Denmark	Japan	Switzerland
Finland	Mexico	United Kingdom
France	Netherlands	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.



# Textiles — Standard atmospheres for conditioning and testing

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard defines the characteristics and use of standard atmospheres for conditioning and for determining the physical and mechanical properties of textiles.

## 2 BASIC DEFINITIONS

**2.1 relative humidity :** The ratio of the actual pressure of the water vapour in the atmosphere to the saturation vapour pressure at the same temperature. The ratio is usually expressed as a percentage.

**2.2 standard temperate atmosphere :** An atmosphere which has a relative humidity of 65 % and a temperature of 20 °C.

**2.2.1 standard temperate atmosphere for testing :** An atmosphere which has a relative humidity of  $65 \pm 2$  % and a temperature of  $20 \pm 2$  °C.

**2.3 standard tropical atmosphere :** An atmosphere which has a relative humidity of 65 % and a temperature of 27 °C.

**2.3.1 standard tropical atmosphere for testing :** An atmosphere which has a relative humidity of  $65 \pm 2$  % and a temperature of  $27 \pm 2$  °C.

NOTE — The adjectives “temperate” and “tropical” as used in this International Standard have been chosen for the limited use of the textile industry.

## 3 PRE-CONDITIONING

Before conditioning a textile, pre-conditioning may be required. If so, the textile shall be brought approximately

to equilibrium in an atmosphere having a relative humidity of between 10 and 25 % and a temperature not exceeding 50 °C.

These conditions may be obtained by heating air at 65 % relative humidity and 20 °C (the standard temperate atmosphere) to a temperature of 50 °C, or by heating air at 65 % relative humidity and 27 °C (the standard tropical atmosphere) to a temperature up to 50 °C.

## 4 CONDITIONING

Before a textile is tested to determine a physical or mechanical property, it shall be conditioned by placing it in the standard temperate atmosphere for testing, in such a way that the air flows freely through the textile, and keeping it there for the time required to bring it into equilibrium with the atmosphere.

Unless otherwise specified in the method of test, the textile should be considered to be in equilibrium when successive weighings, at intervals of 2 h, of the textile materials freely exposed to the moving air show no progressive change in mass greater than 0,25 %.

In tropical or sub-tropical countries, the standard tropical atmosphere for testing may be used.

## 5 TESTING

Except for special cases (for example wet tests), physical and mechanical tests of textiles are carried out in the conditioned state in the standard temperate atmosphere for testing. In tropical and sub-tropical countries, however, the standard tropical atmosphere for testing may be used.