## Tekstiil. Kangasmaterjalide surveomadused. Osa 2: Survetugevuse ja -venivuse määramise pneumaatiline meetod

Textiles - Bursting properties of fabrics - Part 2: Pneumatic method for determination of bursting strength and bursting distension



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 13938-2:2000 sisaldab Euroopa standardi EN ISO 13938-2:1999 ingliskeelset teksti. This Estonian standard EVS-EN ISO 13938-2:2000 consists of the English text of the European standard EN ISO 13938-2:1999.

Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

# This standard will describe a pneumatic method for the determination of bursting strength and bursting distension of textile fabrics. From the available data there appears to be no significant difference in the bursting strength results achieved using hydraulic or pneumatic burst testers, for pressures up to 800 kPa. This pressure range covers the majority of performance levels expected of general apparel. For speciality textiles requiring high bursting pressures, the hydraulic apparatus is more suitable.

### Scope:

This standard will describe a pneumatic method for the determination of bursting strength and bursting distension of textile fabrics. From the available data there appears to be no significant difference in the bursting strength results achieved using hydraulic or pneumatic burst testers, for pressures up to 800 kPa. This pressure range covers the majority of performance levels expected of general apparel. For speciality textiles requiring high bursting pressures, the hydraulic apparatus is more suitable.

**ICS** 59.080.30

Võtmesõnad: burst tests, bursting strength, determination, fabrics, pneumatic tests, tests, textiles

## **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 13938-2

August 1999

59.080.30

### **English version**

### Textiles

### Bursting properties of fabrics

Pneumatic method for determination of bursting strength and bursting distension (ISO 13938-2:1999)

Textiles - Propriétés de résistance à l'éclatement des étoffes - Partie 2: Méthode pneumatique pour la détermination de la résistance et de la déformation à l'éclatement (ISO 13938-2: 1999)

Textilien - Bersteigenschaften von textilen Flächengebilden - Teil 2: Pneumatisches Verfahren zur Bestimmung von Berstdruck und Berstwölbung (ISO 13938-2: 1999)

This European Standard was approved by CEN on 1998-12-06.

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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. 300 M

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

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### **Foreword**

International Standard

ISO 13938-2: 1999 Textiles – Bursting properties of fabrics – Part 2: Pneumatic method for determination of bursting strength and bursting distension,

which was prepared by ISO/TC 38 'Textiles' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 248 'Textiles and textile products', the Secretariat of which is held by BSI, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by February 2000 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

### Endorsement notice

The text of the International Standard ISO 13938-2:1999 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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### 1 Scope

This standard describes a pneumatic pressure method for the determination of bursting strength and bursting distension of textile fabrics.

NOTE: EN ISO 13938-1 describes a method using hydraulic pressure.

The method is applicable to knitted, woven, nonwoven and laminated fabrics. It may be suitable for fabrics produced by other techniques. The test is suitable for test specimens in either the conditioned or wet state.

From the available data there appears to be no significant difference in the bursting strength results achieved using hydraulic or pneumatic burst testers, for pressures up to 800 kPa. This pressure range covers the majority of performance levels expected of general apparel. For speciality textiles requiring high bursting pressures, the hydraulic apparatus is more suitable.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of this International Standard dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of curently valid International Standards.

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

EN ISO 3696 Water for analytical laboratory use - Specification and test methods

(ISO 3696:1987)

EN 30012-1:1993 Quality assurance requirements for measuring equipment -

Part 1:Metrological confirmation system for measuring equipment

(ISO 10012-1:1992)

### 3 Definitions

For the purposes of this standard the following definitions apply:

- 3.1 test area: Area of the test specimen within the circular clamping device.
- **3.2 bursting pressure (pressure at burst):** Maximum pressure applied to a test specimen clamped over an underlying diaphragm until the test specimen ruptures.
- **3.3 bursting strength (strength at burst):** Pressure obtained by subtracting the diaphragm pressure from the mean bursting pressure.
- **3.4 diaphragm pressure:** Pressure applied to the diaphragm, with no test specimen present, to distend it to the mean bursting distension of the test specimen.