

**Tekstiil. Kangasmaterjalide  
surveomadused. Osa 1: Survetugevuse ja -  
venivuse määramise hüdrauliline meetod**

Textiles - Bursting properties of fabrics - Part 1:  
Hydraulic method for determination of bursting  
strength and bursting distension

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 13938-1:2000 sisaldab Euroopa standardi EN ISO 13938-1:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 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 13938-1:2000 consists of the English text of the European standard EN ISO 13938-1:1999.</p> <p>This document is endorsed on 11.01.2000 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><b>Käsitlusala:</b> This Standard will describe a hydraulic method for the determination of bursting strength and bursting distension of textile fabrics.</p>	<p><b>Scope:</b> This Standard will describe a hydraulic method for the determination of bursting strength and bursting distension of textile fabrics.</p>
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**ICS** 59.080.30

**Võtmesõnad:** burst tests, bursting strength, determination, fabrics, hydraulic tests, tests, textiles

English version

Textiles

Bursting properties of fabrics

Part 1: Hydraulic method for determination of bursting strength and  
bursting distension  
(ISO 13938-1 : 1999)

Textiles – Propriétés de résistance à  
l'éclatement des étoffes – Partie 1:  
Méthode hydraulique pour la  
détermination de la résistance et de  
la déformation à l'éclatement  
(ISO 13938-1 : 1999)

Textilien – Bersteigenschaften von  
textilen Flächengebilden – Teil 1:  
Hydraulisches Verfahren zur  
Bestimmung von Berstdruck und  
Berstwölbung (ISO 13938-1 : 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.

**CEN**

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

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

## Foreword

International Standard

ISO 13938-1 : 1999 Textiles – Bursting properties of fabrics – Part 1: Hydraulic 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 13938-1 : 1999 was approved by CEN as a European Standard without any modification.

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

## 1 Scope

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

In this part a hydraulic pressure is applied using a constant rate of pumping device.

NOTE prEN ISO 13938-2 describes a method using pneumatic 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 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 specialty 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. For 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 currently 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.