Rubber- or plastic-coated fabrics - Determination of bursting strength - Part 2: Hydraulic method

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12332-2:2003 sisaldab Euroopa standardi EN 12332-2:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12332-2:2003 consists of the English text of the European standard EN 12332-2:2002. This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This Part of this European Standard specifies a method for determining the bursting strength of coated fabrics using a forcing fluid and a diaphragm machine	**Scope:** This Part of this European Standard specifies a method for determining the bursting strength of coated fabrics using a forcing fluid and a diaphragm machine

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Võtmesõnad: artificial leathers, bursting strength, bursting tests, cloth, coated fabrics, hydraulic, hydraulics, liquid pressure, plastics-coated, rubber, rubber coating, test equipment, test specimens, testing, textiles

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English version

Rubber- or plastic-coated fabrics - Determination of bursting strength - Part 2: Hydraulic method

Supports textiles revêtus de caoutchouc ou de plastique - Détermination de la résistance à l'éclatement - Partie 2: Méthode hydraulique

Mit Kautschuk oder Kunststoff beschichtete Textilien - Bestimmung der Berstfestigkeit - Teil 2: Hydraulisches Verfahren

This European Standard was approved by CEN on 3 August 2002.

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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.

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Foreword

This document (EN 12332-2:2002) has been prepared by Technical Committee CEN /TC 248, "Textiles and textiles 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

EN 12332 "*Rubber- or plastic-coated fabrics – Determination of bursting strength*" consists of two Parts:

- *Part 1: Steel ball method.*

- *Part 2: Hydraulic method.*

NOTE Persons using this standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This Part of this European Standard specifies a method for determining the bursting strength of coated fabrics using a forcing fluid and a diaphragm machine.

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 2231, *Rubber- or plastics - coated fabrics — Standard atmospheres for conditioning and testing (ISO 2231: 1989)*

EN ISO 2286-1, *Rubber- or plastics-coated fabrics — Determination of roll characteristics — Part 1: Methods for determination of length, width and net mass (ISO 2286-1:1998)*

3 Principle

A circular test specimen and an underlying elastic diaphragm are clamped around their edges over the top of a chamber. The specimen is gradually stretched into a dome shape by forcing fluid into the chamber at a constant rate. The pressure of the fluid at failure of the specimen and the distension, measured in terms of the height of the dome are recorded.

4 Apparatus and materials

A diaphragm machine[1)] with:

4.1 A rigid chamber filled with fluid and having a circular aperture of diameter equal to, or up to 0,5 mm greater than the diameter of the circular free area.

4.1.1 A circular elastic diaphragm mounted over the aperture in the chamber. The diaphragm and its seal with the chamber shall be able to withstand pressures greater than the burst strength of the material being assessed. The modulus of elasticity of the diaphragm shall be as low as possible, a value of 5 % of the modulus of the test specimen is recommended.

4.1.2 A means of clamping the test specimen around its edge, above the diaphragm and over the aperture in the chamber, leaving a central circular free area of diameter (113 ± 1) mm or preferably (35,7 ± 0,5) mm.

The design of the clamping system shall ensure that the test specimen does not slip during the test and shall neither stretch nor compress the central area of the specimen as it is clamped.

The following has been found to be suitable; six concentric grooves 2,5 mm apart and 1,25 mm deep, cut into the lower clamping surface so that the ridges between the groves have 0,5 mm radius tops.

1) Often called " Mullen type machine".