SLOVENSKI STANDARD
SIST ENV 14237:2002

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Tekstilije za zdravstveno oskrbo

Textiles in the healthcare system

Textilien im Gesundheitswesen

Textiles dans le systeme de santé

Ta slovenski standard je istoveten z: **ENV 14237:2002**

ICS:

11.140	Oprema bolnišnic	Hospital equipment
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English version

Textiles in the healthcare system

Textiles utilisés dans le domaine de la santé

Textilien im Gesundheitswesen

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Contents

Foreword

This document ENV 14237:2002 has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI.

In this standard the annex A is normative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Prestandard provides a specification for unused textiles in the healthcare system when placed on the market.

The properties, references and requirements are shown in Table 1 to 8.

1 Scope

This European Prestandard specifies basic requirements and test methods for unused textiles in the healthcare system to help to secure the suitability of a product for its intended use.

It is recognised that materials are currently available which outperform this standard; these listed minimums are designed to assure that an acceptable performance is attained.

This European Prestandard is not applicable to surgical textiles under the medical devices directive nor protective clothing under the PPE directive.

2 Normative references

This European Prestandard 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 Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 410, *Glass in building — Determination of luminous and solar characteristics of glazing.*

EN 1103, *Textiles — Burning behaviour — Fabrics for apparel — Detailed procedure to determine the burning behaviour of fabrics for apparel.*

EN 1644-1:1997, *Test methods for nonwoven compresses for medical use — Part 1: Nonwovens used in the manufacture of compresses.*

EN 12590, *Textiles — Industrial sewing threads made wholly or partly from synthetic fibres.*

prEN 13773, *Textiles and textile products – Curtains and drapes – Burning behaviour – Classification scheme.*

EN 20139, *Textiles — Standard atmospheres for conditioning and testing (ISO 139:1973).*

EN 25077, *Textiles — Determination of dimensional change in washing and drying (ISO 5077:1984*).

EN ISO 6330, *Textiles — Domestic washing and drying procedures for textile testing (ISO 6330:2000).*

prEN ISO 13936-1, *Textiles — Determination of the slippage resistance of yarns at a seam in woven fabrics — Part 1: Fixed opening method (ISO/DIS 13936-1:1998).*

prEN ISO 13936-2, *Textiles — Determination of the slippage resistance of yarns at a seam in woven fabrics — Part 2: Fixed load method (ISO/DIS 13936-2:1998).*

EN ISO 105-B02, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, including amendment 1:1998).*

EN ISO 105-C06, *Textiles — Tests for colour fastness — Part C06: Colour fastness to domestic and commercial laundering (ISO 105-C06:1994).*

EN ISO 105-E04, *Textiles — Tests for colour fastness — Part E04: Colour fastness to perspiration (ISO 105-E04:1994).*

EN 20105-N01, *Textiles — Tests for colour fastness — Part N01: Colour fastness to bleaching: Hypochlorite (ISO 105-N01:1993).*

EN ISO 105-N02, *Textiles — Tests for colour fastness — Part N02: Colour fastness to bleaching: Peroxide (ISO 105-N02:1993).*

EN ISO 105-P01, *Textiles — Tests for colour fastness — Part P01: Colour fastness to dry heat (excluding pressing) (ISO 105-P01:1993).*

EN ISO 105-X12, *Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing (ISO 105-X12:1993).*

EN ISO 9237, *Textiles — Determination of permeability of fabrics to air (ISO 9237:1995).*

EN ISO 12945-1, *Textiles – Determination of fabric propensity to surface fuzing and to pilling – Part 1: Pilling box method (ISO 12945-1:2000).*

EN ISO 12945-2, *Textiles — Determination of fabric propensity to surface fuzing and to pilling – Part 2: Modified Martindale method (ISO 12945-2:2000).*

EN ISO 12952-1, *Textiles — Burning behaviour of bedding items — Part 1: General test methods for the ignitability by a smouldering cigarette (ISO 12952-1:1998).*

EN ISO 12952-2, *Textiles — Burning behaviour of bedding items — Part 2: Specific test methods for the ignitability by a smouldering cigarette (ISO 12952-2:1998).*

EN ISO 12952-3, *Textiles — Burning behaviour of bedding items — Part 3: General test methods for the ignitability by a small open flame (ISO 12952-3:1998).*

EN ISO 12952-4, *Textiles — Burning behaviour of bedding items — Part 4: Specific test methods for the ignitability by a small open flame (ISO 12952-4:1998).*

EN ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method (ISO 13934-1:1999).*

EN ISO 13938-1, *Textiles — Bursting properties of fabrics — Part 1: Hydraulic method for determination of bursting strength and bursting distension (ISO 13938-1:1999).*

EN ISO 13938-2, *Textiles — Bursting properties of fabrics — Part 2: Pneumatic method for determination of bursting strength and bursting distension (ISO 13938-2:1999).*

ISO 4915, *Textiles — Stitch types — Classification and terminology.*

ISO 4916, *Textiles — Seam types — Classification and terminology.*

ISO 5085-1, *Textiles — Determination of thermal resistance — Part 1: Low thermal resistance.*

ISO 11092, *Textiles — Physiological effects — Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test).*

3 Terms and definitions

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

3.1 products

3.1.1
accessories
all components different from the main materials of the product (e.g. cuffs, buttons, sewing thread, press studs, zippers etc.)

3.1.2
baby clothing
any garment being provided by the hospital that is worn by babies during their stay

3.1.3
bed textiles
any two-dimensional textile such as sheets, pillow covers, secondary covers, mattress covers, draw sheets, bed spreads

3.1.4
blanket
covering used on beds to provide thermal comfort

3.1.5
curtain
piece of hanging cloth that can be drawn to cover a window or to provide a screen

3.1.6
encasing
fully fitting article which covers all faces of the mattress

3.1.7
mattress protector against liquids
mattress cover impermeable to liquids

3.1.8
patient's clothing
any garment being provided by the hospital that is worn by a patient during a stay

3.1.9
pillow
cloth bag filled with soft material used for patients support

3.1.10
quilt
cover made of two layers of cloth with soft insulating material in-between to provide thermal comfort

3.1.11
staff
any person charged with (part of) medical treatment of a patient or the performance of a medical duty

3.1.12
staff clothing
any over garment without a specific protective function worn by the staff

3.1.13
towels
piece of cloth used for drying a person

3.2 properties

3.2.1
air permeability
velocity of an air flow passing perpendicularly through a test specimen under specified conditions of test area, pressure drop and time

[EN ISO 9237]

3.2.2
bursting strength (strength at burst)
pressure obtained by subtracting the diaphragm pressure from the mean bursting pressure

[EN ISO 13928-1:1999]

3.2.3
colour fastness

resistance of the colour of textiles to the different agents to which these materials may be exposed during manufacture and their subsequent use. The change in colour and staining of undyed adjacent fabrics are assessed as fastness ratings

[EN ISO 105-A01]

3.2.4
dimensional change
change in length and/or width of fabrics, garments or other textile articles which may occur when subjected to an appropriate combination of specified washing and drying procedures

[ISO 5077]

3.2.5
flame retardance
property of a material whereby flaming combustion is slowed, terminated or prevented

[EN ISO 13943]

3.2.6
liquid absorbency time (wettability)
time required for a test specimen of fabric to become completely wetted by the test liquid and imbibe test liquid into its interior structure

[EN 1644-1 :1997, annex B]

3.2.7
liquid absorptive capacity (wettability)
mass of liquid absorbed per unit mass of the fabric, expressed as a percentage, after either a standard immersion time or after the time needed to completely wet the fabric and after drainage has occured

[EN 1644-1:1997, annex C]

3.2.8
pilling
generation of pills over the surface of the fabric

[EN ISO 12945-1]

3.2.9
tensile strength
maximum tensile force recorded in extending a test-piece to breaking point, the tensile force recorded at the moment of rupture

NOTE The tensile strength and tensile strength at break may be different. If after yield the elongation continues and is accompanied by a drop in force resulting in tensile strength at break being lower than tensile strength.

3.2.10
thermal resistance, *R*
ratio of the temperature difference between two faces of a test specimen to the rate of flow of heat per unit area normal to the faces. It is analogous to eletrical resistance in the case of current flow through an electrical conductor [ISO 5085-1]

3.2.11
water penetration
hydrostatic head supported by a fabric. It is measure of the opposition to the passage of water through the fabric

[EN 20811]

3.2.12
water vapour resistance, R_{et}
water-vapour pressure difference between the two faces of a material divided by the resultant evaporative heat flux per unit area in the direction of the gradient. The evaporative heat flux may consist of both diffusive and convective components

[ISO 11092]

4 Properties, references and requirements

The following tables for properties, references and requirements of product groups are the basis for agreements between the supplier and customer.