

**Textiles — Assessment of the ignitability of
bedding items — Part 2: Ignition source: match
flame equivalent**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 12952-2:2010 sisaldab Euroopa standardi EN ISO 12952-2:2010 ingliskeelset teksti.

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English Version

Textiles - Assessment of the ignitability of bedding items - Part 2: Ignition source: match-flame equivalent (ISO 12952-2:2010)

Textiles - Évaluation de l'allumabilité des articles de literie -
Partie 2: Source d'allumage: flamme simulant une
allumette (ISO 12952-2:2010)

Textilien - Bewertung des Brennverhaltens von Bettzeug -
Teil 2: Prüfverfahren für die Entzündbarkeit durch eine
kleine offene Flamme (ISO 12952-2:2010)

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Foreword

This document (EN ISO 12952-2:2010) has been prepared By Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 38 "Textiles".

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of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 12952-3:1998, EN ISO 12952-4:1998.

This document has been submitted to the parallel Enquiry as prEN ISO 12952-3.

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Introduction

Fires are sometimes caused by the ignition of bedding items by smokers' materials. The ignitability of bedding items by a smouldering cigarette or a small open flame is therefore an important feature in the assessment of the risk of fire.

It cannot be assumed that protection against a smouldering ignition source will automatically give protection against flaming ignition. Users of this part of ISO 12952 should therefore consider the need to submit test specimens to both cigarette and flaming ignition tests.

This part of ISO 12952 describes test methods with a match-flame equivalent as the ignition source. Testing against the ignition source of a smouldering cigarette is covered in ISO 12952-1.

This part of ISO 12952 can be used for the assessment of ignitability of individual items of bedding and of composite arrangements.

Textiles — Assessment of the ignitability of bedding items —

Part 2: Ignition source: match-flame equivalent

WARNING — This test relates only to the ignitability of materials under the particular conditions of testing. It is not intended as a means of assessing the full potential fire hazard of the bedding item in use. Particular attention is drawn to the possibility of ignition of lower parts of a bedding assembly when using bedding items which are not themselves ignited. The performance of beds and mattresses requires reference to testing and performance standards other than those described in this part of ISO 12952.

1 Scope

This part of ISO 12952 specifies tests for assessing the ignitability of all bedding items when subjected to a match-flame equivalent.

This part of ISO 12952 applies to bedding items, which can normally be placed on a mattress, for example:

- mattress covers;
- underlays;
- incontinence sheets and pads;
- sheets;
- blankets;
- electric blankets;
- quilts (duvets) and covers;
- pillows (whatever the filling) and bolsters;
- pillowcases.

This part of ISO 12952 does not apply to mattresses, bed bases and mattress pads.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3175-2 *Textiles — Professional care, drycleaning and wetcleaning of fabrics and garments — Part 2: Procedure for testing performance when cleaning and finishing using tetrachloroethene*

ISO 3175-3, *Textiles — Professional care, drycleaning and wetcleaning of fabrics and garments — Part 3: Procedure for testing performance when cleaning and finishing using hydrocarbon solvents*

ISO 3175-4, *Textiles — Professional care, drycleaning and wetcleaning of fabrics and garments — Part 4: Procedure for testing performance when cleaning and finishing using simulated wetcleaning*

ISO 4880, *Burning behaviour of textiles and textile products — Vocabulary*

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

ISO 10528, *Textiles — Commercial laundering procedure for textile fabrics prior to flammability testing*

ISO 12952-1, *Textiles — Assessment of the ignitability of bedding items — Part 1: Ignition source: smouldering cigarette*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4880 and in ISO 12952-1 apply.

4 Principle

A test specimen placed on a testing substrate is subjected to a small open flame placed on top of and/or below the test specimen. Any progressive smouldering and/or flaming is noted.

Where the actual mattress used is known, it can replace the testing substrate.

5 Criteria of ignition

5.1 Progressive smouldering ignition

All the types of behaviour given in a) to d) are considered to be progressive smouldering ignition:

- a) any test specimen that displays escalating combustion behaviour, making it unsafe to continue the test, and that requires forcible extinction;
- b) any test specimen that smoulders until it is consumed, within a period of 15 min following the removal of the ignition source;
- c) any test specimen that produces externally detectable amounts of smoke, heat or glowing, after a period of 15 min following the removal of the ignition source;
- d) any test specimen that, on final examination (see Clause 12), shows evidence of active smouldering.

NOTE In practice, it has been found that there is usually a clear distinction between materials which char under the influence of an ignition source, but which do not propagate further (non-progressive), and those where smouldering develops and spreads (progressive).

5.2 Flaming ignition

The following types of behaviour are considered to be flaming ignition:

- a) any test specimen that displays escalating combustion behaviour, making it unsafe to continue the test, and that requires forcible extinction;
- b) any test assembly that burns until it is consumed within the test duration;
- c) any test specimen that continues to flame for more than 120 s after removal of the ignition source.