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**Textiles — Assessment of the ignitability  
of bedding items —**

**Part 1:  
Ignition source: smouldering cigarette**

*Textiles — Évaluation de l'allumabilité des articles de literie —  
Partie 1: Source d'allumage: cigarette en combustion*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 12952-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 248, *Textiles and textile products*, in collaboration with Technical Committee ISO/TC 38, *Textiles*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces ISO 12952-1:1998 and ISO 12952-2:1998, which have been technically revised.

ISO 12952 consists of the following parts, under the general title *Textiles — Assessment of the ignitability of bedding items*:

- *Part 1: Ignition source: smouldering cigarette*
- *Part 2: Ignition source: match-flame equivalent*

## 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 smouldering cigarette as the ignition source. Testing against the ignition source of a small open flame is covered in ISO 12952-2.

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

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# Textiles — Assessment of the ignitability of bedding items —

## Part 1:

### Ignition source: smouldering cigarette

**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 test methods for assessing the ignitability of all bedding items when subjected to a smouldering cigarette.

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*

### 3 Terms and definitions

For the purposes of this document the terms and definitions given in ISO 4880 and the following apply.

- 3.1**  
**bed**  
mattress placed on top of a bed base with no other bedding items present
- 3.2**  
**bed assembly**  
stack of successive layers of mattress and various bedding items, with or without a pillow and pillowcase, representing a section through the centre of a made up bed
- 3.3**  
**bed base**  
structure that supports the mattress
- 3.4**  
**bedding**  
general term for all items placed on the mattress or the bed by a user to provide comfort and warmth and/or for decorative purposes, for example, sheets, blankets, bed spreads, valances, quilts, duvets, quilt covers and mattress covers
- 3.5**  
**bolster**  
long round pillow or cushion
- 3.6**  
**duvet**  
bedding item made principally from a woven material and filled, for example, with down, feathers or filling fibres
- NOTE A duvet can be quilted in various ways.
- 3.7**  
**incontinence sheet**  
sheet to protect the mattress and bedding for incontinent people
- 3.8**  
**mattress**  
product in the form of a resilient material, or padding material in combination with steel springs, enveloped by a cover fabric
- 3.9**  
**mattress cover**  
secondary covering material that can be removed for laundering purposes