

BS EN 597-1:2015



BSI Standards Publication

Furniture — Assessment of the ignitability of mattresses and upholstered bed bases

Part 1: Ignition source smouldering cigarette

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National foreword

This British Standard is the UK implementation of EN 597-1:2015. It supersedes BS EN 597-1:1995 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee FW/6, Flammability performance and fire tests for furniture.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Furniture - Assessment of the ignitability of mattresses and upholstered bed bases - Part 1: Ignition source smouldering cigarette

Ameublement - Évaluation de l'allumabilité des
matelas et des sommiers rembourrés - Partie 1 : Source
d'allumage : cigarette en combustion

Möbel - Bewertung der Entzündbarkeit von Matratzen
und gepolsterten Bettböden - Teil 1: Zündquelle:
glimmende Zigarette

This European Standard was approved by CEN on 7 November 2015.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 597-1:2015) has been prepared by Technical Committee CEN/TC 207 “Furniture”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by June 2016 and conflicting national standards shall be withdrawn at the latest by June 2016.

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 597-1:1994.

The test is based on EN 1021-1, *Furniture – Assessment of the ignitability of upholstered furniture – Part 1: Ignition source: smouldering cigarette*.

The main changes in relation to EN 597-1:1994 are:

- modification to the specification of the weight of the ignition source;
- modification to the test procedure to allow a third ignition source to be placed on the test sample if either of the two initial ignition sources self extinguish prior to the completion of the test.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard is one of a series of standards concerned with the ignitability of mattresses and upholstered bed bases using different ignition sources. The ignition source used in this European Standard is a smouldering cigarette.

When mattresses or bed bases are used or stored on their own, it is desirable to know their ignitability in their own right.

It cannot be assumed that protection against flaming sources will automatically give protection against smouldering ignition. Users of the standard should therefore recognize the need to submit test specimens to both cigarette and flaming ignition tests.

WARNING — Attention is drawn to the fact that the tests given in the test report (see Clause 10) are not intended to reproduce the full fire hazards that may be encountered.

1 Scope

This European Standard specifies a test method to assess the ignitability of mattresses, upholstered bed bases or mattress pads when subjected to a smouldering cigarette as an ignition source.

Air mattresses and water beds are excluded from this standard.

The standard contains one annex:

Annex A (informative) Model test report form.

2 Terms and definitions

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

2.1

progressive smouldering

exothermic oxidation, not accompanied by flaming, that is self-propagating, i.e. independent of the ignition source, which may or may not be accompanied by incandescence

2.2

flaming

undergoing combustion in the gaseous phase with the emission of light

2.3

flammability

ability of a material or product to burn with a flame under the specified test conditions

2.4

ignitability

measure of the ease with which a material, product or component can be ignited so as to flame or progressively smoulder

2.5

ignition source

source of energy used to ignite combustible materials or products

2.6

mattress pad

upholstered product that is used in conjunction with, and to complement, a mattress or upholstered bed base

2.7

mattress

upholstered product intended for sleeping upon

2.8

bed base

structure that supports a mattress or the surface(s) of a mattress that support(s) a user

2.9

upper surface

surface of a bed base that supports a mattress or the surface(s) of a mattress that support(s) a user