International Standard

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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

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Foreword

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This document was prepared by Technical Committee ISO/TC 136, *Furniture*.

A list of all parts in the ISO 16502 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found atwww.iso.org/members.html.

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Introduction

This document is a part of the ISO 16502 series concerned with the ignitability of mattresses and upholstered bed bases using different ignition sources. The ignition source used in this document 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 automatically gives protection against smouldering ignition. Users of this document 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 11) are not intended to reproduce the full fire hazards that may be encountered.

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

Part 1:
Ignition source: smouldering cigarette

1 Scope

This document 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.

This document does not apply to air mattresses and water beds.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
progressive smouldering
exothermic oxidation, not accompanied by *flaming* (3.2), that is self-propagating, i.e. independent of the *ignition source* (3.4), which may or may not be accompanied by incandescence

3.2
flaming
undergoing combustion in the gaseous phase with the emission of light

3.3
ignitability
measure of the ease with which a material, product or component can be ignited so as to flame or progressively smoulder

3.4
ignition source
source of energy used to ignite combustible materials or products

3.5
mattress pad
upholstered product that is used in conjunction with, and to complement, a *mattress* (3.6) or upholstered *bed base* (3.7)

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