

Flexible cellular polymeric materials — Polyurethane foam for load-bearing applications excluding carpet underlay — Specification

ICS 83.100

National foreword

This British Standard is the UK implementation of EN ISO 5999:2007. It supersedes BS EN ISO 5999:2004 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/71, Flexible cellular materials.

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.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 February 2008

© BSI 2008

ISBN 978 0 580 55325 7

Amendments/corrigenda issued since publication

Date	Comments

English Version

Flexible cellular polymeric materials - Polyurethane foam for
load-bearing applications excluding carpet underlay -
Specification (ISO 5999:2007)

Matériaux polymères alvéolaires souples - Mousse de
polyuréthane pour utilisations soumises à des charges, à
l'exclusion des revers de tapis - Spécifications (ISO
5999:2007)

Weich-elastische Polymerschäume -
Polyurethanschäume für Polsterzwecke mit Ausnahme
von Teppichunterlagen - Anforderungen (ISO 5999:2007)

This European Standard was approved by CEN on 12 October 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 5999:2007) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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 May 2008, and conflicting national standards shall be withdrawn at the latest by May 2008.

This document supersedes EN ISO 5999:2004.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 5999:2007 has been approved by CEN as a EN ISO 5999:2007 without any modification.

INTERNATIONAL STANDARD

ISO 5999

Second edition
2007-11-01

Flexible cellular polymeric materials — Polyurethane foam for load-bearing applications excluding carpet underlay — Specification

*Matériaux polymères alvéolaires souples — Mousse de polyuréthane
pour utilisations soumises à des charges, à l'exclusion des revers de
tapis — Spécifications*



Reference number
ISO 5999:2007(E)

AVA Documents
Document Sharing Hub



Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Classification.....	2
3.1 Type.....	2
3.2 Class	2
3.3 Grade.....	6
4 Material	7
5 Construction.....	7
6 Surface condition.....	7
7 Odour	7
8 Colour	7
9 Component mass and density.....	7
10 Dimensions.....	8
11 Physical and chemical requirements.....	8
12 Burning characteristics.....	10
13 Test methods.....	10
13.1 Test conditions	10
13.2 Density	10
13.3 Hardness.....	10
13.4 Resilience	10
13.5 Compression set.....	11
13.6 Dynamic fatigue by constant-load pounding.....	11
13.7 Tensile strength and elongation at break	11
13.8 Burning behaviour	11
13.9 Heat ageing.....	11
13.10 Humidity ageing	11
14 Marking	11
Annex A (informative) Typical applications for each class of material	12
Annex B (informative) Burning properties of flexible polyurethane foam and recommendations regarding its use	13
Annex C (informative) Main details of revision	15

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 5999 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

This second edition cancels and replaces the first edition (ISO 5999:1982), which has been technically revised (for the main details, see Annex C).