BS EN ISO 23537-1:2016+A1:2018

BSI Standards Publication

Requirements for sleeping bags

Part 1: Thermal and dimensional requirements

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National foreword

This British Standard is the UK implementation of EN ISO 23537-1:2016+A1:2018. It is identical to ISO 23537-1:2016, incorporating amendment 1:2018. It supersedes BS EN ISO 23537-1:2016, which is withdrawn.

BSI, as a member of CEN, is obliged to publish EN ISO 23537-1 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval as a European Standard.

It is the opinion of the UK committee that the variability and repeatability of the thermal test was not correctly verified following agreed test procedure modifications during the development of this standard: e.g. by application of a round robin testing process. In addition the calibration of thermal manikins is still in question, which could add variability to the test procedure.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment A1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee SW/136, Sports, playground and other recreational equipment.

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

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This European Standard was approved by CEN on 5 September 2016.

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This amendment exists in three official versions (English, French, German).

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European foreword

This document (EN ISO 23537-1:2016) has been prepared by Technical Committee ISO/TC 83 "Sports and other recreational facilities and equipment" in collaboration with Technical Committee CEN/TC 136 “Sports, playground and other recreational facilities and equipment” the secretariat of which is held by DIN.

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 2017, and conflicting national standards shall be withdrawn at the latest by April 2017.

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Endorsement notice

The text of ISO 23537-1:2016 has been approved by CEN as EN ISO 23537-1:2016 without any modification.

Foreword to amendment A1

This document (EN ISO 23537-1:2016/A1:2018) has been prepared by Technical Committee ISO/TC 83 "Sports and other recreational facilities and equipment" in collaboration with Technical Committee CEN/TC 136 “Sports, playground and other recreational facilities and equipment” the secretariat of which is held by DIN.

This Amendment to the European Standard EN ISO 23537-1:2016 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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Endorsement notice

The text of ISO 23537-1:2016/A1:2018 has been approved by CEN as EN ISO 23537-1:2016/A1:2018 without any modification.

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Document Sharing Hub
Full document details: BS EN ISO 23537-1:2016+A1:2018

Contents

Page

Foreword ... **iv**
Introduction ... **v**
1 Scope ... **1**
2 Normative references ... **1**
3 Terms and definitions ... **2**
4 Requirements and test methods ... **3**
4.1 Water vapour permeability index ... 3
4.2 Inside dimensions ... 3
4.2.1 Inside length ... 3
4.2.2 Maximum inside width ... 3
4.2.3 Inside foot width ... 3
4.3 Total mass ... 3
4.4 Thermal properties ... 3
4.4.1 Principle ... 3
4.4.2 Thermal manikin ... 4
4.4.3 Climatic room ... 4
4.4.4 Thermal resistance ... 4
4.4.5 Artificial ground ... 5
4.4.6 Test samples and pre-treatment ... 5
4.4.7 Test procedure ... 5
4.4.8 Calculation of temperatures of the range of utility ... 5
4.4.9 Calibration of thermal manikin ... 7
5 Test report ... **7**
6 Labelling ... **8**
6.1 Graph for the range of utility ... 8
6.2 Marking ... 8
6.3 Information supplied to the consumer ... 9
Annex A (normative) **Reference values of thermal resistance for calibration** ... **11**
Annex B (informative) **Precision of test results** ... **13**
Annex C (normative) **Physiological model for calculation of range of utility** ... **14**
Annex D (informative) **Warning of misuse of temperature rating** ... **19**
Annex E (informative) **Rationale** ... **20**

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Document Sharing Hub
Full document details: BS EN ISO 23537-1:2016+A1:2018

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

ISO 23537 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 136, *Sports, playground and other recreational facilities and equipment* in collaboration with ISO Technical Committee TC 83, *Sports and other recreational facilities and equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 23537 consists of the following parts, under the general title, *Requirements for sleeping bags*:

— *Part 1: Thermal and dimensional requirements*

— *Part 2: Fabric and material properties*

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Introduction

This is the first edition of this part of ISO 23537. It is based on continued development of the European Standard, EN 13537.

This International Standard consists of two parts which allows for separate validation of thermal properties and product and material performance. This separation of parts also allows for continued development of new product combinations as it encourages manufacturers to consider new combinations of materials which for example might not be suitable to test by traditional textile physical tests, but which can still have thermal properties evaluated.

This part of ISO 23537 considers important aspects to the thermal performance of the sleeping bag.

During the development of this part of ISO 23537, consideration was given to the need to continue to reduce inter laboratory variability of the thermal testing and a number of test parameters have been tightened as a consequence.

Consideration has also been given to the definition of extreme climate zone which is now referred to as temperatures <–20 °C.

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INTERNATIONAL STANDARD **ISO 23537-1:2016+A1:2018**

Requirements for sleeping bags —

Part 1:
Thermal and dimensional requirements

1 Scope

This part of ISO 23537 specifies the requirements and test methods as well as provisions for labelling of adult sized sleeping bags for use in sports and leisure time activities.

This part of ISO 23537 does not apply to sleeping bags intended for specific purpose such as military use and extreme climate zone expedition. It does not apply to sleeping bags for children or babies.

NOTE 1 No prediction model exists for the determination of the limiting temperatures based on the thermal resistance of the sleeping bag for children and babies. Moreover, such a model for testing cannot be developed because the necessary controlled sleep trials with children or babies in climatic chambers are, out of ethical reasons, not permitted.

NOTE 2 The limit temperature for extreme climate conditions is seen to be –20 °C.

This part of ISO 23537 describes the method for the assessment of the performance in steady-state conditions of a sleeping bag with regard to the protection against cold.

NOTE 3 Sleeping bags without homogeneous fillings designed to provide local extra insulation in certain parts pose issues with the calibration and/or test procedure. Ongoing work continues to provide suitable means of establishing temperature ratings.

2 Normative references

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

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 1096, *Plywood — Classification*

ISO 3758, *Textiles — Care labelling code using symbols*

ISO 11092, *Textiles — Physiological effects — Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test)*

ISO 15831:2004, *Clothing — Physiological effects — Measurement of thermal insulation by means of a thermal manikin*

EN 13088, *Manufactured articles filled with feather and down — Method for the determination of a filled product's total mass and of the mass of the filling*

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