INTERNATIONAL STANDARD

ISO 22653

First edition
2003-12-01

Footwear — Test methods for lining and insocks — Static friction

Chaussures — Méthodes d'essai pour la doublure et pour la première de propreté — Frottement statique

Reference number
ISO 22653:2003(E)

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Published in Switzerland

Foreword

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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 22653 was prepared by CEN (as EN 12826:2000) and was adopted, under a special “fast-track procedure”, by Technical Committee ISO/TC 216, *Footwear*, in parallel with its approval by the ISO member bodies.

For the purposes of international standardization, a list of corresponding International and European Standards for which equivalents are not given in EN 12826 has been added as Annex ZZ.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 309 "Footwear", the secretariat of which is held by AENOR.

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of an identical text or by endorsement, at the latest by September 2000, and conflicting national standards shall be withdrawn at the latest by September 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European standard specifies two methods of assessing the frictional properties of lining and insocks, irrespective of the material.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 12222, *Footwear – Standard atmospheres for conditioning and testing of footwear and components for footwear.*

3 Definitions

For the purposes of this standard the following definitions apply:

3.1
coefficient of static friction (μ_s)
the ratio of the force necessary to cause the tangential separation of two stationary surfaces to the perpendicular force acting upon the two surfaces

3.2
coefficient of kinetic friction (μ_k)
the ratio of the force necessary to maintain a constant velocity between two surfaces in contact to the perpendicular force acting upon the two surfaces

3.3
kinetic angle of surface drag *(D_k)*
the angle of the inclined plane at which the test sled will slide down the inclined plane when sliding is initiated by a standard impulse

3.4
static angle of surface drag *(D_s)*
the angle of the inclined plane at which the test sled will slide down the inclined plane under its own mass and momentum

4 Apparatus and material

The following apparatus and material shall be used:

4.1 Method A

4.1.1 A sled, (150 mm ± 1 mm) long x (100 mm ± 1 mm) wide having a mass of 700 g ± 15 g to which a lining or insock test specimen is attached (see 5.1.1) and a test specimen support of cellular rubber, or plastics material, 3 mm thick and of medium apparent density. The surface of the sled is flat and smooth or polished. The edges of the sled do not contain any burrs or roughness.