Footwear - Test methods for stiffeners and toepuffs - Bondability (ISO 20863:2018)



### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

| See Eesti standard EVS-EN ISO 20863:201 sisaldab Euroopa standardi EN ISO 20863:201 ingliskeelset teksti.                 | This Estonian standard EVS-EN ISO 20863:2018 consists of the English text of the European standard EN ISO 20863:2018.              |  |  |
|---|--|--|--|
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas   | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |  |  |
| Euroopa standardimisorganisatsioonid on teinud<br>Euroopa standardi rahvuslikele liikmetele<br>kättesaadavaks 09.05.2018. | J 1  |  |  |
| Standard on kättesaadav Eest<br>Standardikeskusest.   | The standard is available from the Estonian Centre for Standardisation.  |  |  |

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

### ICS 61.060

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht <a href="mailto:www.evs.ee">www.evs.ee</a>; telefon 605 5050; e-post <a href="mailto:info@evs.ee">info@evs.ee</a>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

# EUROPEAN STANDARD NORME EUROPÉENNE

**EN ISO 20863** 

**EUROPÄISCHE NORM** 

May 2018

ICS 61.060

Supersedes EN ISO 20863:2004

#### **English Version**

# Footwear - Test methods for stiffeners and toepuffs - Bondability (ISO 20863:2018)

Chaussures - Méthodes d'essai pour contreforts et bouts-durs - Aptitude au collage (ISO 20863:2018) Schuhe - Prüfverfahren für Hinterkappen und Zehenkappen - Klebefestigkeit (ISO 20863:2018)

This European Standard was approved by CEN on 17 February 2018.

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

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## **European foreword**

This document (EN ISO 20863:2018) has been prepared by Technical Committee ISO/TC 216 "Footwear" in collaboration with Technical Committee CEN/TC 309 "Footwear" the secretariat of which is held by UNE.

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 November 2018, and conflicting national standards shall be withdrawn at the latest by November 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 20863:2004.

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, 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 20863:2018 has been approved by CEN as EN ISO 20863:2018 without any modification.

| ntents   | Page   |
|--|--|
| eword  | iv   |
| Scope  | 1  |
| Normative references   | 1  |
| Terms and definitions  | 1  |
| Apparatus and materials  | 1  |
| 5.1 Method 1: Heat activated materials   | 2  |
|  |  |
| Expression of results 7.1 Dry bondability  | 3<br>3   |
| Test report  | 4  |
| liography  | 5  |
| Ochonologie de la company de l |  |
|  | Scope Normative references Terms and definitions Apparatus and materials  Sampling and conditioning 5.1 Method 1: Heat activated materials 5.2 Method 2: Solvent activated materials  Procedure  Expression of results 7.1 Dry bondability |

#### **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, 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: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 216, Footwear.

This second edition cancels and replaces the first edition (ISO 20863:2004), which has been technically revised.

# Footwear — Test methods for stiffeners and toepuffs — Bondability

### 1 Scope

This document specifies a method for the determination of the bondability of heat activated and solvent activated stiffeners and toepuffs to upper and lining materials.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7500-1, Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system

ISO 18454, Footwear — Standard atmospheres for conditioning and testing of footwear and components for footwear

#### 3 Terms and definitions

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

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### bondability

aptitude of a material to be bonded to itself or to other material by applying pressure and/or heat and eventually adhesive

#### 4 Apparatus and materials

The following apparatus and materials shall be used:

- **4.1 Tensile testing machine,** with a jaw separation rate of  $100 \text{ mm/min} \pm 10 \text{ mm/min}$ , an appropriate force range (this will usually be less than 100 N), capable of measuring the force to an accuracy of better than 2 % as specified by class 2 in ISO 7500-1, which registers the force applied in terms of the displacement.
- **4.2 Press knife**, or other means of cutting rectangular test specimens of  $(150 \text{ mm} \pm 10 \text{ mm}) \times (30 \text{ mm} \pm 2 \text{ mm})$ .
- **4.3 Press,** with the following characteristics:
- **4.3.1 Heated plates,** which can maintain a pre-established temperature with an accuracy of ±5 °C.