Irish Standard
I.S. EN 13832-1:2018

Footwear protecting against chemicals - Part 1: Terminology and test methods

I.S. EN 13832-1:2018

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 13832-1:2018 is the adopted Irish version of the European Document EN 13832-1:2018, Footwear protecting against chemicals - Part 1: Terminology and test methods

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13832-1

October 2018

ICS 13.340.50

Supersedes EN 13832-1:2006

English Version

Footwear protecting against chemicals - Part 1: Terminology and test methods

Chaussures protégeant contre les produits chimiques - Partie 1 : Terminologie et méthodes d'essais

Schuhe zum Schutz gegen Chemikalien - Teil 1: Terminologie und Prüfverfahren

This European Standard was approved by CEN on 20 May 2018.

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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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN 13832-1:2018 E

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European foreword

This document (EN 13832-1:2018) has been prepared by Technical Committee CEN/TC 161 “Foot and leg protection”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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 13832-1:2006.

EN 13832, *Footwear protecting against chemicals*, is published in three parts:

— Part 1: Terminology and test methods

— Part 2: Requirements for limited contact with chemicals

— Part 3: Requirements for prolonged contact with chemicals

This standard is intended for use in conjunction with EN ISO 20345, EN ISO 20346 and EN ISO 20347.

Overview of major technical changes compared to the previous edition:

— New splashing test

— Reference to the new permeation standard EN 16523-1

— Annex B for damages assessment

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

1 Scope

This European Standard specifies test methods for the determination of the resistance of footwear against selected chemicals under the following contact situations: splashing, degradation, and permeation.

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.

EN 16523-1:2015, *Determination of material resistance to permeation by chemicals - Part 1: Permeation by liquid chemical under conditions of continuous contact*

EN ISO 868:2003, *Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:2003)*

EN ISO 20344:2011, *Personal protective equipment - Test methods for footwear (ISO 20344:2011)*

ISO 23529, *Rubber - General procedures for preparing and conditioning test pieces for physical test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 20344:2011 and EN 16523-1 and the following apply.

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
degradation
deleterious change in one or more properties of a footwear material due to contact with a chemical

Note 1 to entry: These changes may include, e.g. flaking, swelling, disintegration, embrittlement, discoloration, dimensions, appearance, hardening and softening.

3.2
permeation
process by which a chemical moves through a footwear material at a molecular level

Note 1 to entry: Permeation involves the following:

— absorption of molecules of the chemical into the contacted (outside) surface of a material;

— diffusion of the absorbed molecules into the material;

— desorption of the molecules from the opposite (inside) surface of the material.

3.3
splashing
contact after pouring of chemical on the footwear