VÄLGUMIHKLID. OHUTUSNÕUDED

Lighters - Safety specification (ISO 9994:2018)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 9994:2019 sisaldab Euroopa standardi EN ISO 9994:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 9994:2019 consists of the English text of the European standard EN ISO 9994:2019.
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 Euroopa standardi rahvuslikele liikmetele kättesaadavaks 23.01.2019.	Date of Availability of the European standard is 23.01.2019.
Standard on kättesaadav Eesti 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 standardiosakond@evs.ee.

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EUROPEAN STANDARD

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English Version

Lighters - Safety specification (ISO 9994:2018)

Briquets - Spécifications de sécurité (ISO 9994:2018)

Feuerzeuge - Festlegungen für die Sicherheit (ISO 9994:2018)

This European Standard was approved by CEN on 19 December 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
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN ISO 9994:2019 E

European foreword

This document (EN ISO 9994:2019) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 355 “Lighters” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by July 2019, and conflicting national standards shall be withdrawn at the latest by July 2019.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 ISO 9994:2006 and EN ISO 9994:2006/A1:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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 9994:2018 has been approved by CEN as EN ISO 9994:2019 without any modification.

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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).

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 www.iso.org/patents).

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

For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 4, *Burning behaviour*.

This fifth edition cancels and replaces the fourth edition (ISO 9994:2005), which has been technically revised.

The main changes compared to the previous edition are as follows:

— Clause 2, 3.22, 3.23, subclause 4.2.2.4, subclause 4.2.3, subclause 4.2.4, subclause 4.7, subclause 6.1.2, subclause 6.11.2.2.9 and subclause 6.11.2.2.10 have been added.

— term number 3.6, subclause 4.2.2.3, subclause 4.5, subclause 5.1, subclause 5.7, Figure 4, subclause 6.3.2.7, subclause 6.7.4, subclause 6.9.3.3, subclause 6.10.4, subclause 6.12.3, subclause 7.3.1, subclause 7.4, Figure 5, Figure 7 and Annex A have been modified.

— Bibliography has been deleted.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Lighters, being flame-producing devices, can, as do all flame sources, present a potential hazard to users. The safety specifications given in this document cannot eliminate all hazards, but are intended to reduce potential hazards to users.

This document is intended to be revised periodically to consider flame height reduction for the various technologies in line with technological progress.

Lighters — Safety specifications

WARNING — Persons using this document should be familiar with normal laboratory practice, if applicable. This document does not purport to address all the safety concerns, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to determine the applicability of any other restrictions.

1 Scope

This document specifies requirements for lighters to ensure a reasonable degree of safety for normal use or reasonably foreseeable misuse of such lighters by users.

This document applies to all flame-producing products commonly known as cigarette lighters, cigar lighters and pipe lighters.

It does not apply to matches and flame-producing products intended solely for igniting materials other than cigarettes, cigars, and pipes.

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 7941, *Commercial propane and butane — Analysis by gas chromatography*

UL 1439, *Tests for Sharpness of Edges on Equipment*

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 https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
lighter
manually operated flame-producing device, employing a petrochemical derivative as a fuel, normally used for deliberately igniting cigarettes, cigars and pipes, and which might foreseeably be used to *ignite* (3.21) materials such as paper, wicks, candles and lanterns

Note 1 to entry: Lighters are specifically not intended for use as candles or as flashlights, or for other uses requiring an extended burn time.

3.2
fluid lighter
lighter (3.1), with an exposed wick, that employs as fuel liquid hydrocarbons such as hexane whose gauge vapour pressure at 24 °C does not exceed 34,5 kPa

3.3
gas lighter
lighter (3.1) that employs as fuel liquefied hydrocarbons such as *n*-butane, isobutane and propane whose gauge vapour pressure at 24 °C exceeds 104 kPa