VÄLGUMIHKLID. OHUTUSNÕUDED

Lighters - Safety specification (ISO 9994:2018)



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.
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EUROPEAN STANDARD

EN ISO 9994

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

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of an identical text or by endorsement, at the latest by July 2019, and conflicting national standards shall be withdrawn at the latest by July 2019.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

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Endorsement notice

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

Co	ntent	ts — — — — — — — — — — — — — — — — — — —	Page
Fore	word		v
Intr	oductio	on	vi
1	Scon	De	1
_	5.0 1		
2		mative references	
3	Tern	ns and definitions	1
4	Func	ctional requirements	
	4.1	Flame generation	
	4.2	Flame heights	
		4.2.1 Non-adjustable lighters	
	4.3	4.2.2 Adjustable lighters Flame-height adjustment	
	4.3 4.4	Resistance to spitting or sputtering and flaring	
	4.5	Flame extinction	
	4.6	Volumetric displacement of fuel	
	4.7	Mass of fuel	8
5	Stru	ctural integrity requirements	
3	5.1	External finish	
	5.2	Compatibility with fuel	
	5.3	Resistance to fuel loss	
	5.4	Resistance to dropping	
	5.5	Resistance to elevated temperature	9
	5.6	Resistance to internal pressure	
	5.7	Burning behaviour	
	5.8	Resistance to cyclic burning	
	5.9	Resistance to continuous burning	
6	Test	methods	
	6.1	Test specimens and test sequencing	
		6.1.1 Test specimens	
	()	6.1.2 Test sequencing	
	6.2	Flame height measurement 6.2.1 Apparatus	
		6.2.2 Procedure	
	6.3	Spitting, sputtering and flaring tests	
	0.5	6.3.1 General	11
		6.3.2 Procedure	
	6.4	Flame extinction test	
		6.4.1 Apparatus	12
		6.4.2 Procedure	
	6.5	Fuel compatibility test	
		6.5.1 General	
		6.5.2 Apparatus	
	6.6	6.5.3 Procedure Refilling test	
	0.0	6.6.1 General	
		6.6.2 Apparatus	
		6.6.3 Procedure	
	6.7	Volumetric fuel-displacement test	
		6.7.1 General	
		6.7.2 Test specimens	
		6.7.3 Apparatus	
		6.7.4 Procedure	
	6.8	Drop test	17

EVS-EN ISO 9994:2019

	6.8.1 General	17
	6.8.2 Apparatus	
	6.8.3 Procedure	18
6.9	Elevated-temperature test	19
	6.9.1 General	19
	6.9.2 Apparatus	
	6.9.3 Procedure	19
6.10	Internal-pressure test	20
	6.10.1 General	
	6.10.2 Test specimens	
	6.10.3 Apparatus	
	6.10.4 Procedure	
6.11	J O	
	6.11.1 General	
	6.11.2 Procedure	
6.12	0	
	6.12.1 General	
	6.12.2 Apparatus	
	6.12.3 Procedure	22
Inst	ructions and warnings	23
7.1	General	23
7.2	Location	
7.3	Content	
7.4	Safety signs	
7.5	Refilling instructions	
,	7.5.1 General	
	7.5.2 Fluid lighters	
	7.5.3 Gas lighters	
Duc		
FIU		25
	duct marking	
	normative) Test sequencing	
	normative) Test sequencing	

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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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.

est.
ed to be in technology 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