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Vžigalniki - Vžigalniki, varni za otroke - Varnostne zahteve in preskusne metode

Lighters - Child safety requirements for lighters - Safety requirements and test methods

Feuerzeuge - Anforderungen an die Kindersicherheit von Feuerzeugen -
Sicherheitsanforderungen und Prüfverfahren

Briquets - Exigences de sécurité-enfants pour les briquets - Exigences de sécurité et
méthodes d'essai

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EUROPEAN STANDARD
NORME EUROPÉENNE
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English Version

Lighters - Child safety requirements for lighters - Safety requirements and test methods

Briquets - Exigences de sécurité enfants pour les
briquets - Exigences de sécurité et méthodes d'essai

Feuerzeuge - Anforderungen an die Kindersicherheit
von Feuerzeugen - Sicherheitsanforderungen und
Prüfverfahren

This European Standard was approved by CEN on 4 February 2016.

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EN 13869:2016 (E)**European foreword**

This document (EN 13869:2016) has been prepared by Technical Committee CEN/TC 355 "Project Committee - 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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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

This document supersedes EN 13869:2002+A1:2011.

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

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Introduction

This European Standard is based on US consumer product safety standard for cigarette lighters, given in 16 CFR, Chapter II, Part 1210 "Safety standard for cigarette lighters" of 12 July 1993.

Certain mechanical test methods have been introduced as an alternative to the Child Test Panel for some types of ignition mechanism. It is recognized that assessing lighters with child test panels can be expensive, can go against ethical principles, can take a considerable time and can lead to problems with enforcement. Under a mandate from the European Commission to CEN, it was therefore necessary to devise at least equally effective and reliable but less onerous alternatives for verifying the child-resistance of lighters. It should be noted that the alternative mechanical tests are not mandatory and that the child test panel assessment may still be carried out.

The mechanical test methods have been based upon the findings and recommendations from a study on child resistance requirements for cigarette lighters that was commissioned in 2011 and undertaken between November 2011 and April 2013. This report has been accepted by the European Commission.

It has not been possible to define technical parameters for all child-resistant mechanisms in use and only some types of ignition mechanisms are within the scope of the mechanical tests. It is possible that other types of ignition mechanisms (for example sliders and flint mechanisms) might be addressed at a later date.

An alternative to the full child panel test method, based on the sequential method, has also been introduced.

Life time has been included in the mechanical test method. No concerns have been raised about the validity of the child panel test but it is anticipated that the child panel test could be reviewed in the future to harmonize the test methods of the life time of the child resistance of the lighter.

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1 Scope

This European Standard specifies child safety requirements for lighters.

This European Standard does not apply to matches or any other lighting device intended primarily for igniting materials other than smoking materials, such as fuel for fireplaces, or for charcoal, or gas-fired grills.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 9994, *Lighters — Safety specification (ISO 9994)*

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025)*

3 Terms and definitions

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

3.1 lighter

manually operated flame-producing device employing a fuel, including butane or liquid fuel, normally used for deliberately igniting in particular cigarettes, cigars and pipes, and which may foreseeably be used to ignite materials such as paper and wicks of candles and lanterns, manufactured with an integral supply of fuel, whether intended to be refuelled or not

Note 1 to entry: A price threshold for lighters, whether they are refillable or not, is applied in countries outside the European Union where child-resistance requirements are in force (US, Canada, Australia, New Zealand) of a customs valuation or ex-factory price under US \$ 2,25; this corresponds with the threshold of EURO 2,00 initially defined in the standard EN 13869:2002.

3.2 refillable repairable lighter

refillable lighters for which producers provide on request to the competent authorities the necessary documentation substantiating that the lighters are designed, manufactured and placed on the market such as to ensure a continual expected safe use over a lifetime of at least five years, subject to repair, and which fulfil in particular all of the following:

- a written guarantee of at least two years for each lighter, in accordance with Directive 1999/44/EC Article 6 of the European Parliament and of the Council; this guarantee is in addition to the consumers' rights granted under Article 3 thereof;
- the practical possibility for the lighter to be repaired and safely refilled over the entire lifetime, including in particular a repairable ignition mechanism;
- parts that are not consumable, but are likely to wear out or fail in continual use after the guarantee period, are accessible for replacement or repair under the producer's responsibility by an authorized or specialized after-sales service centre based in the European Union

Note 1 to entry: The above mentioned criteria relate to the so-called luxury and semi-luxury lighters which are also characterized by a low degree of substitutability with other lighters and an individual consumer packaging.

3.3

child-appealing lighter

lighter, including any holder which can be incorporated later or any attachment which can be fixed later, that resembles by any means to another object commonly recognized as appealing to or intended for use by children younger than 51 months, or has entertaining audio effects or animated effects

Note 1 to entry: This includes, but is not limited to, lighters or holders that are clearly intended to hold lighters, the shape of which resembles cartoon characters, toys, guns, watches, telephones, musical instruments, vehicles, human body or parts of the human body, animals, food or beverages, or that play musical notes, or have flashing lights or moving objects or other entertaining features. This excludes lighters that are printed or decorated with logos, labels, decals, artwork or heat shrinkable sleeves.

3.4

successful operation

one signal of any duration from a surrogate lighter within either of the two 5 min test periods specified in 5.8

3.5

producer

either:

- the manufacturer of the product when established in the European Union, any other organization presenting itself as the manufacturer by affixing to the product its name, trade mark or other distinctive mark, or the organization that reconditions the product; or
- the manufacturer's representative when the manufacturer is not established in the European Union or, if there is no representative established in the European Union, the importer of the product into the European Union; or
- other professionals in the supply chain insofar as their activities may affect the safety properties of a product

3.6

surrogate lighter

device that:

- approximates to the appearance, size, shape and weight of, and is identical in all other factors that affect child resistance including operation (e.g. force(s) and displacement(s)), within reasonable manufacturing tolerances, to a lighter intended for use by consumers;
- has no fuel;
- does not produce a flame; and
- produces an audible or visual signal that is clearly discernible when the device is activated in a manner that would normally produce a flame in a production lighter

Note 1 to entry: This definition does not require a lighter to be modified with electronics or the like to produce a signal. Producers can use as a surrogate lighter a production lighter but without fuel, if a distinct signal such as a "click" can be heard clearly when the mechanism is operated in each manner that would produce a flame in a production lighter.

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3.7

model

one or more lighters from the same producer that do not differ in design or other characteristics in any manner that can affect child-resistance

Note 1 to entry: Lighter characteristics that can affect child-resistance include, but are not limited to, size, shape, case material and ignition mechanism (including child-resistant features).

3.8

CEN geographical area

geographical area, constituted of the territories of the States the national standards organizations which are “national member” of the European Committee for Standardization (CEN), according to Clause 6 of CEN statutes

3.9

operating button

part of the lighter pressed to activate the ignition mechanism

3.10

nominal surface area of the operating button

area of the smallest rectangle that can contain the operating button when viewed perpendicular to the direction in which the button moves when activating the ignition mechanism

3.11

push-button ignition lighter

Piezoelectric lighter with straight linear displacement of its operating button that relies solely on the force of the operating button to provide its resistance to operation by young children

Note 1 to entry: Other push-button ignition mechanisms may exist but are not covered by this definition.

4 Safety requirements

4.1 General

Clauses 4.4 and 4.5 do not apply to refillable repairable lighters defined in 3.2.

4.2 EN ISO 9994

Lighters shall comply with EN ISO 9994.

4.3 Non-child-appealing requirement

No lighter shall be a child-appealing lighter.

4.4 Other requirements

The mechanism or system of a lighter that makes the product resistant to successful operation by young children shall:

- a) reset itself automatically after each operation of the ignition mechanism of the lighter;
- b) not impair safe operation of the lighter when used in a normal and convenient manner;
- c) be effective for the reasonably expected life of the lighter; and

- d) not be easily overridden or deactivated.

4.5 Child test panel requirements, mechanical and geometric requirements

4.5.1 General

Lighters shall meet at least one of the following:

- a) the child test panel requirements in 4.5.2;
- b) if the lighter relies solely on the force on the operating button to provide its resistance to operation by young children, the mechanical and geometric requirements described in Clause 4.5.3

4.5.2 Child panel test requirements

4.5.2.1 General

The lighter shall comply with either 4.5.2.2; 4.5.2.3 or 4.5.2.4

4.5.2.2 Testing using US method

The lighter shall be resistant to successful operation by at least 85 % of the child-test panel when tested according to the US consumer product safety standard for cigarette lighters, given in 16 CFR, Chapter II, Part 1210 "Safety standard for cigarette lighters" of 12 July 1993.

4.5.2.3 Testing using the full child panel

The lighter shall be resistant to successful operation by at least 85 % of the child-test panel as described in a) and b) below.

Panels of 100 children each, up to a maximum of 2 panels (see Table 1), shall be used in accordance with Clause 5.

- a) if no more than 10 children in the first 100 child test panel successfully operated the surrogate lighter, the lighter represented by the surrogate lighter shall be considered to be resistant to successful operation by at least 85 % of the child test panel and no further testing is conducted. If 11 to 18 children in the first 100 child test panel successfully operated the surrogate lighter, the test results are inconclusive and the surrogate lighter shall be tested with a second 100 child test panel in accordance with Clause 5. If 19 or more of the children in the first 100 child test panel successfully operated the surrogate lighter, the lighter represented by the surrogate shall be considered not resistant to successful operation by at least 85 % of the child test panel and no further testing is conducted.
- b) If additional testing of the surrogate lighter is required by 4.5.2.3 a), conduct the test specified in Clause 5 using a second 100 child test panel. If a total of no more than 30 of the children in the combined first and second 100 child test panels successfully operated the surrogate lighter, the lighter represented by the surrogate lighter shall be considered resistant to successful operation by at least 85 % of the child test panel and no further testing is performed. If a total of 31 or more children in the combined first and second 100 child test panels successfully operated the surrogate lighter, the lighter represented by the surrogate lighter shall be considered not resistant to successful operation by 85 % of the child test panel and no further testing is conducted.