



**SLOVENSKI STANDARD**  
**SIST EN 13869:2004+A1:2011**  
**01-september-2011**

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

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

Feuerzeuge - Kindergesicherte Feuerzeuge - Sicherheitsanforderungen und Prüfverfahren

Briquets - Briquets de sécurité enfants - Exigences de sécurité et méthodes d'essai

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**Ta slovenski standard je istoveten z: EN 13869:2002+A1:2011**

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**ICS:**

97.180	Razna oprema za dom in trgovino	Miscellaneous domestic and commercial equipment
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**SIST EN 13869:2004+A1:2011**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 13869:2002+A1**

June 2011

ICS 97.180

Supersedes EN 13869:2002

English Version

## Lighters - Child-resistance for lighters - Safety requirements and test methods

Briquets - Briquets de sécurité enfants - Exigences de sécurité et méthodes d'essai

Feuerzeuge - Kindergesicherte Feuerzeuge - Sicherheitsanforderungen und Prüfverfahren

This European Standard was approved by CEN on 25 May 2002 and includes Amendment 1 approved by CEN on 18 May 2011.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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## Foreword

<sup>A1</sup> This document (EN 13869:2002+A1:2011) has been prepared by Technical Committee CEN/TC 355 "Project Committee - Lighters", the secretariat of which is held by AFNOR. <sup>A1</sup>

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 December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

<sup>A1</sup> This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. <sup>A1</sup>

This document includes Amendment 1, approved by CEN on 2011-05-18.

This document supersedes EN 13869:2002.

The start and finish of text introduced or altered by amendment is indicated in the text by tags <sup>A1</sup> <sup>A1</sup>.

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 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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**EN 13869:2002+A1:2011 (E)****1 Scope**

**A1** This European Standard specifies safety requirements for lighters. These requirements are intended to make the operation of lighters resistant to children aged less than 51 months subject to the provisions of this European Standard.

This European Standard is applicable to lighters, as defined in 3.1, which use, as fuel, butane, isobutane, propane, or other liquefied hydrocarbon, or a mixture containing any of these, whose vapour at 24 °C exceeds a gauge pressure of 103 kPa.

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;
- 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 requirements:
  - 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 authorised or specialised after-sales service centre based in the European Union.

NOTE 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. **A1**

**2 Normative references**

**A1** The following referenced documents are indispensable for the application 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. **A1**

EN ISO 9994, *Lighters — Safety specification (ISO 9994:1995)*

**A1** EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2005)* **A1**

**3 Terms and definitions**

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

**A1 3.1****lighter**

manually operated flame-producing device employing a 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 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. <sup>A1</sup>

### 3.2

#### <sup>A1</sup> child appealing lighter <sup>A1</sup>

flame-producing product commonly used by consumers to ignite cigarettes, cigars and pipes, 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 recognised as appealing to or intended for use by children younger than 51 months, or has entertaining audio effects or animated effects. A <sup>A1</sup> child appealing lighter <sup>A1</sup> can operate on any fuel, including butane or liquid fuel. 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

### 3.3

#### successful operation

one signal of any duration from a surrogate lighter within either of the two 5 min test periods specified in <sup>A1</sup> 5.7.2 <sup>A1</sup>

### <sup>A1</sup> 3.4

#### producer

producer means:

- the manufacturer of the product when he is established in the European Union, any other person presenting himself as the manufacturer by affixing to the product his name, trade mark or other distinctive mark, or the person who reconditions the product;
- 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;
- other professionals in the supply chain insofar as their activities may affect the safety properties of a product <sup>A1</sup>

### 3.5

#### 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 and the force(s) required for operation), 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 will be clearly discernible when the surrogate lighter is activated in a manner that would normally produce a flame in a production lighter

NOTE 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.

### 3.6

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

**EN 13869:2002+A1:2011 (E)****3.7****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

**4 Safety requirements**

**4.1** Lighters shall comply with EN ISO 9994.

**4.2** No lighter shall be a  $\text{A1}$  child appealing lighter  $\text{A1}$ .

**4.3** Lighters shall be resistant to successful operation by at least 85 % of the child-test panel when tested in accordance with clause 5.

**4.4** The mechanism or system of a lighter that makes the product resist successful operation by 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.

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**5 Test method****5.1 Method of test**

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The test method shall either be the one described in subclause 5.2 to 5.9 hereafter, or the one defined in 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.

**5.2 Child test panel**

**5.2.1** The test to determine if a lighter is resistant to successful operation by children uses a panel of children to test a surrogate lighter representing the production lighter intended for use. Written informed consent shall be obtained from a parent or legal guardian of a child before the child participates in the test.

The children shall come from families for whom the first language is the principal language of the district in which the tests are conducted.

**5.2.2** The test shall be conducted using at least one, but no more than two, 100 child test panels in accordance with 5.7.

**5.2.3** The children for the test panel shall live within the CEN geographical area.

**5.2.4** The age and sex distribution of each 100-child panel shall be:

- a)  $(30 \pm 2)$  children [ $(20 \pm 1)$  boys and  $(10 \pm 1)$  girls] 42 months to 44 months old;
- b)  $(40 \pm 2)$  children [ $(26 \pm 1)$  boys and  $(14 \pm 1)$  girls] 45 months to 48 months old;
- c)  $(30 \pm 2)$  children [ $(20 \pm 1)$  boys and  $(10 \pm 1)$  girls] 49 months to 51 months old.

NOTE To calculate a child's age in months:



— subtract the child's birth date from the test date; e.g.:

	day	month	year
test date	3	8	94
- birth date	- 23	- 6	- 90
= difference	-20	2	4

- multiply the difference in years by 12 months; e.g.: 4 years x 12 months = 48 months;
- add the difference in months; e.g.: 48 months + 2 months = 50 months;
- if the difference in days is:
  - greater than 15 (e.g.: 16, 17), add 1 month;
  - less than -15 (e.g.: -16, -17), subtract 1 month; e.g.: 50 months – 1 month = 49 months;
  - between -15 and 15 (e.g.: -15, -14, ... 14, 15), do not add or subtract 1 month.

**5.2.5** No child with a permanent or temporary illness, injury, or handicap that would interfere with the child's ability to operate the surrogate lighter shall be selected for participation.

**5.2.6** Two children at a time shall participate in testing of surrogate lighters. Extra children whose results will not be counted in the test may be used if necessary to provide the required partner for test subjects, if the extra children are within the required age range and a parent or guardian of each such child has signed a consent form.

**5.2.7** No child shall participate in more than one test panel, or test more than one surrogate lighter. No child shall participate in both child-resistant package testing and surrogate lighter testing on the same day.

### 5.3 Test sites, environment and testers

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#### 5.3.1 Test sites

Surrogate lighters shall be tested within the CEN geographical area either:

- a) at 5 or more test sites for each 100-child panel if the sites are the customary nursery schools or day care centres of the participating children. No more than 20 children shall participate in the tests at each site; or
- b) at one or more central locations, provided the participating children are drawn from a variety of locations within the geographical area.

#### 5.3.2 Test environment

Testing of surrogate lighters shall be conducted either:

- a) in a room that is familiar to the children on the test panel (for example, a room the children frequent at their customary nursery school or day care centre); or
- b) in a room at a central location that may be unfamiliar. In this case, the tester shall allow at least 5 min for the children to become accustomed to the new environment before starting the test.

The area in which the testing is conducted shall be well lit and free from distractions.

The children shall be allowed freedom of movement to work with their surrogate lighters, as long as the tester can watch both children at the same time.

Two children at a time shall participate in testing of surrogate lighters.

The children shall be seated side by side in chairs approximately 15 cm apart, across a table from the tester. The table shall be normal table height for the children, so that they can sit up at the table with their legs underneath and so that their arms will be at a comfortable height when on top of the table. The children's chairs shall be "child-size".