



SLOVENSKI STANDARD

SIST EN 13869:2004

01-januar-2004

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**

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ICS:

97.180

Razna oprema za dom in
trgovino

Miscellaneous domestic and
commercial equipment

SIST EN 13869:2004

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13869

June 2002

ICS 97.180

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.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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Contents

	page
Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Safety requirements	5
5 Test method	5
5.1 Method of test	5
5.2 Child test panel	6
5.3 Test sites, environment and testers	6
5.4 Surrogate lighters	7
5.5 Encouragement	8
5.6 Children who refuse to participate	8
5.7 Test procedure	9
5.8 Data collection and recording	10
5.9 Evaluation of test results and acceptance criterion	11
6 Test report	12
7 Declaration of compliance	12
8 Product marking	12
Bibliography	13

Foreword

This document has been prepared by CMC.

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 2002, and conflicting national standards shall be withdrawn at the latest by December 2002.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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EN 13869:2002 (E)

1 Scope

This European Standard specifies safety requirements for lighters. These requirements are intended to make the lighters subject to the standard's provisions resistant to successful operation by children younger than 51 months.

This European Standard is applicable to lighters, as defined in 3.1.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

3 Terms and definitions

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

3.1 lighter

flame-producing product commonly used by consumers to ignite cigarettes, cigars and pipes, although they can be used to ignite other materials. This term does not include 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

This product, which is refillable or not, has a customs valuation or ex-factory price under EUR 2,00, as adjusted every 5 years with the percentage changes of the European wholesale price index, and its fuel is 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.

3.2 novelty lighter

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 novelty lighter 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 5.7.1

3.4 producer

person or organization responsible for the first placing of the lighter on the market

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)

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

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4 Safety requirements (standards.iteh.ai)

4.1 Lighters shall comply with EN ISO 9994. [SIST EN 13869:2004](https://standards.iteh.ai/catalog/standards/sist/1bfa9cee-2cdc-42e2-bd3d-ec7403916f06/sist-en-13869-2004)

4.2 No lighter shall be a novelty lighter. <https://standards.iteh.ai/catalog/standards/sist/1bfa9cee-2cdc-42e2-bd3d-ec7403916f06/sist-en-13869-2004>

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.

5 Test method

5.1 Method of test

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.

EN 13869:2002 (E)

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 ± 2) children [(20 ± 1) boys and (10 ± 1) girls] 42 months to 44 months old;
- b) (40 ± 2) children [(26 ± 1) boys and (14 ± 1) girls] 45 months to 48 months old;
- c) (30 ± 2) children [(20 ± 1) boys and (10 ± 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 \times 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

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".

5.3.3 Testers

Each tester shall be at least 18 years old and be fluent in the principal language of the district in which the tests are conducted.

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Five or six testers shall be used for each 100-child test panel. Each tester shall test an approximately equal number of children from a 100 child test panel [(20 ± 2) children each for 5 testers and (17 ± 2) children each for 6 testers)].

When a test is initiated with five testers and one tester drops out, a sixth tester may be added to complete the testing. When a test is initiated with six testers and one tester drops out, the test shall be completed using the five remaining testers. When a tester drops out, the requirement for each tester to test an approximately equal number of children does not apply to that tester. When testing is initiated with five testers, no tester shall test more than 19 children until it is certain that the test can be completed with five testers.

5.4 Surrogate lighters

5.4.1 Six surrogate lighters shall be used for each 100 child panel.

The six lighters shall represent the range of forces required for operation of lighters intended for use. All surrogate lighters shall be the same colour. The surrogate lighters shall be labelled with sequential numbers beginning with the number one.

The same six surrogate lighters shall be used for the entire 100 child panel. The surrogate lighters may be used in more than one 100 child panel test.

The surrogate lighters shall be undamaged at the start of the testing by the child panel tests.

The surrogate lighters shall not be exposed to extreme heat or cold. The surrogate lighters shall be tested at room temperature. No surrogate lighter shall be left unattended.

5.4.2 Each surrogate lighter shall be tested by an approximately equal number of children in a 100 child test panel [(17 ± 2) children].