



**SLOVENSKI STANDARD**  
**SIST EN 71-2:2011+A1:2014**  
**01-junij-2014**

**Nadomešča:**  
**SIST EN 71-2:2011**

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**Varnost igráč - 2. del: Vnetljivost (vključno z dopolnilom A1)**

Safety of toys - Part 2: Flammability

Sicherheit von Spielzeug - Teil 2: Entflammbarkeit

Sécurité des jouets - Partie 2: Inflammabilité

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**Ta slovenski standard je istoveten z: EN 71-2:2011+A1:2014**

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**ICS:**

13.220.40	Sposobnost vžiga in obnašanje materialov in proizvodov pri gorenju	Ignitability and burning behaviour of materials and products
97.200.50	Igrače	Toys

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 71-2:2011+A1**

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ICS 13.220.40; 97.200.50

Supersedes EN 71-2:2011

English Version

## Safety of toys - Part 2: Flammability

Sécurité des jouets - Partie 2: Inflammabilité

Sicherheit von Spielzeug - Teil 2: Entflammbarkeit

This European Standard was approved by CEN on 12 July 2011 and includes Amendment 1 approved by CEN on 20 January 2014.

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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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**EN 71-2:2011+A1:2014 (E)****Foreword**

This document (EN 71-2:2011+A1:2014) has been prepared by Technical Committee CEN/TC 52 "Safety of toys", the secretariat of which is held by DS.

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of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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 A1 EN 71-2:2011 A1.

This document includes Amendment 1 approved by CEN on 2014-01-20.

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

Annex B provides details of significant technical changes between this European Standard and the previous edition.

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This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this European Standard.

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This European Standard constitutes the second part of the European Standard on safety of toys and should be read in conjunction with Part 1.

This European Standard for safety of toys consists of the following parts:

- Part 1: *Mechanical and physical properties*
- Part 2: *Flammability*
- Part 3: *Migration of certain elements*
- Part 4: *Experimental sets for chemistry and related activities*
- Part 5: *Chemical toys (sets) other than experimental sets*
- Part 7: *Finger paints — Requirements and test methods*
- Part 8: *Activity toys for domestic use*
- Part 9: *Organic chemical compounds — Requirements*
- Part 10: *Organic chemical compounds — Sample preparation and extraction*
- Part 11: *Organic chemical compounds — Methods of analysis*

NOTE 1 In addition to the above parts of EN 71, the following guidance documents have been published:

- CEN Report, <sup>A1</sup> CR 14379 <sup>A1</sup>, Classification of toys — Guidelines,
- CEN Technical Report <sup>A1</sup> CEN/TR 15071 <sup>A1</sup>, Safety of toys — National translations of warnings and instructions for use in EN 71, and
- CEN Technical Report <sup>A1</sup> CEN/TR 15371 <sup>A1</sup>, Safety of toys — Replies to requests for interpretation of EN 71–1, EN 71–2, and EN 71–8.

NOTE 2 Different legal requirements may exist in non-EU countries.

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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**EN 71-2:2011+A1:2014 (E)****Introduction**

This European Standard aims at reducing as far as possible those hazards which are not evident to users; it does not cover inherent hazards that are obvious to children or the persons in charge of them. Assuming that the toys are used in the intended manner, they should not present any further hazard to children for whom they are intended (according to the Directive 2009/48/EC “intended for use by” means that a parent or supervisor shall reasonably be able to assume by virtue of the functions, dimensions and characteristics of a toy that it is intended for use by children of the stated age group). Allowance should also be made for foreseeable use, bearing in mind the behaviour of children who do not generally share the same degree of care as the average adult user.

As a general rule, toys are designed and manufactured for particular ages of children. Their characteristics are related to the age and stage of development of the children, and their use presupposes certain aptitudes.

Accidents are frequently due to a toy either being given to a child for whom it is not intended, or being used for a purpose other than that for which it was designed. Great care should therefore be taken when choosing a toy or game; account should be taken of the mental and physical development of the child who will be using it.

The requirements of this European Standard do not release parents or carers from their responsibility of watching over the child while he or she is playing.

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## 1 Scope (see A.2)

This European Standard specifies the categories of flammable materials which are prohibited in all toys, and requirements concerning *flammability* of certain toys when they are subjected to a small source of ignition.

The test methods described in Clause 5 are used for the purposes of determining the *flammability* of toys under the particular test conditions specified. The test results thus obtained cannot be considered as providing an overall indication of the potential fire hazard of toys or materials when subjected to other sources of ignition.

This European Standard includes general requirements relating to all toys and specific requirements and methods of test relating to the following toys, which are considered as being those presenting the greatest hazard:

- toys to be worn on the head: beards, moustaches, wigs, etc. made from *hair*, pile or *material with similar features*; masks; hoods, head-dresses, etc.; flowing elements of toys to be worn on the head, but excluding paper novelty hats of the type usually supplied in party crackers;
- toy disguise costumes and toys intended to be worn by a child in play;
- toys intended to be entered by a child;
- *soft-filled toys*.

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NOTE Additional requirements for *flammability* of electric toys are specified in EN 62115.

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## 2 Normative references

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.

EN ISO 2431:1996, *Paints and varnishes — Determination of flow time by use of flow cups (ISO 2431:1993, including Technical Corrigendum 1:1994)*

EN ISO 6941:2003, *Textile fabrics - Burning behaviour - Measurement of flame spread properties of vertically oriented specimens (ISO 6941:2003)*

## 3 Terms and definitions

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

### 3.1

#### **flammability**

ability of a material or a product to burn with a flame under specified test conditions

### 3.2

#### **flaming debris**

material that becomes detached from the sample during the test procedure and continues to flame as it falls

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- 3.3**  
**hair**  
slender flexible fibres intended to represent human or animal hair
- 3.4**  
**soft-filled toy**  
toy, clothed or unclothed, with soft body surfaces and filled with soft material, readily allowing compression of the main part of the toy with the hand
- 3.5**  
**surface flash**  
rapid spread of flame over the surface of a material without ignition of its base structure at the same time
- 3.6**  
**molten drips**  
falling droplets of molten material
- 3.7**  
**flammable liquid**  
liquid having a flash point  $\geq 23$  °C and  $\leq 60$  °C
- 3.8**  
**highly flammable liquid**  
liquid having a flash point  $< 23$  °C and initial boiling point  $> 35$  °C
- 3.9**  
**extremely flammable liquid**  
liquid having a flash point  $< 23$  °C and initial boiling point  $\leq 35$  °C
- 3.10**  
**flammable gas**  
gas or gas mixture having a flammable range with air at 20 °C and a standard pressure of 101,3 kPa
- 3.11**  
**chemical toy**  
toy intended for the direct handling of chemical substances and mixtures and which is used in a manner appropriate to a given age-group and under the supervision of an adult
- 3.12**  
**material with similar features**  
material having the ability to flow like *hair*, to hang closely to the head and continue to move on its own after the head is rotated then stopped
- 3.13**  
**moulded head mask**  
mask that is moulded to the contours of the head or face

NOTE Definitions for *flammable liquid*, *highly flammable liquid*, *extremely flammable liquid* and *flammable gas* have been extracted from REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

## 4 Requirements

### 4.1 General requirements (see A.3)

NOTE 1 Words in *italics* are defined in Clause 3 (Terms and definitions). Additional information on the background and rationale for various requirements is given in Annex A.

NOTE 2 According to Directive 2009/48/EC the following safety requirements apply regarding cleaning and washing: "A toy intended for use by children under 36 months must be designed and manufactured in such a way that it can be cleaned. A textile toy shall, to this end, be washable, except if it contains a mechanism that may be damaged if soaked. The toy shall fulfil the safety requirements also after having been cleaned in accordance with this point from the Directive and the manufacturer's instructions.". The manufacturer should, if applicable, provide instructions on how the toy has to be cleaned. This information is not exhaustive and Directive 2009/48/EC and the associated guidance documents should be consulted for further details.

The following materials shall not be present in toys:

- celluloid (cellulose nitrate), except when used in varnish, paint or glue, or in balls of the type used for table tennis or similar games, and
- materials with the same behaviour in fire as celluloid (see A.3).

Specific materials to which the test flame is applied in order to check compliance of the toy with requirements in 4.2 to 4.5 are considered to comply with the above requirements if the toy meets its appropriate requirements in 4.2 to 4.5:

- materials with a piled surface which produce *surface flash* when a flame is applied to the tested material under the conditions described in 5.5.1 and 5.5.2. Piled surfaces showing no momentary area of flame over the area of the piled surface remote from the test flame are considered to meet this requirement;

In addition, toys shall not contain *flammable gases*, *extremely flammable liquids*, *highly flammable liquids*, *flammable liquids* and *flammable gels* except as provided for below:

- *flammable liquids* and *flammable gels* supplied in sealed containers having a maximum volume of 15 ml per container;
- *highly flammable liquids* and *flammable liquids* being entirely retained within a porous material in capillary channels of writing instruments;
- *flammable liquids* with a viscosity greater than  $260 \times 10^{-6} \text{ m}^2/\text{s}$  corresponding to a flow time of more than 38 s when determined in accordance with EN ISO 2431 using cup No. 6;

**A1**

- *highly flammable liquids* contained in chemical toys, and in olfactory board games, cosmetic kits and gustative games, as defined in 2009/48/EC. **A1**

NOTE 3 Different legal requirements may exist in non-EU countries.

### 4.2 Toys to be worn on the head (see A.4)

#### 4.2.1 General

The requirements of 4.2 apply to:

- beards, moustaches, wigs, etc. made from *hair*, pile or *material with similar features*,