

MÄNGUASJADE OHUTUS. OSA 2: SÜTTIVUS

Safety of toys - Part 2: Flammability

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## EESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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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 28 September 2020.

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## European foreword

This document (EN 71-2:2020) 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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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 71-2:2011+A1:2014.

Additional information on the background and rationale for various requirements are given in Annex A.

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

This document has been prepared under mandate M/445 given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2009/48/EC.

For relationship with EU Directive 2009/48/EC, see informative Annex ZA, which is an integral part of this document.

This document constitutes the second part of the EN 71 series of standards on safety of toys.

EN 71, *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*
- *Part 12: N-Nitrosamines and N-nitrosatable substances*
- *Part 13: Olfactory board games, cosmetic kits and gustative games*
- *Part 14: Trampolines for domestic use*

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

- CEN/TR 15071, Safety of toys — National translations of warnings and instructions for use in *EN 71*, and
- CEN/TR 15371 (all parts), *Safety of toys — Interpretations*
- CEN/TR 16918, *Safety of toys - Children's mouthing behaviour in contact with toys*
- CEN ISO/TR 8124-8, *Safety of toys – Age determination guidelines*

NOTE 2 Words in italics are defined in Clause 3 (Terms and definitions).

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

This document 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; account should be taken of the mental and physical development of the child who will be using it.

The requirements of this document do not release parents or carers from their responsibility of supervising the child while he or she is playing.

### 1 Scope

This document 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 are not considered as providing an overall indication of the potential fire hazard of toys or materials when subjected to other sources of ignition.

This document 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 pile or *flowing elements*; masks; hoods, headdresses, etc.; However, paper and paperboard hats without embellishments or attachments are excluded;
- toy *disguise costumes* and toys intended to be worn by a child in play;
- *toys intended to be entered by a child* and constructed from textiles and/or polymer sheets and films;
- *soft-filled toys*.

NOTE Additional requirements for *flammability* of electric toys are specified in EN 62115[2]

### 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.

EN ISO 2431:2019, *Paints and varnishes - Determination of flow time by use of flow cups (ISO 2431:2019)*



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:

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia. available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

#### 3.1

##### **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

[SOURCE EN 71-4:2013[3]]

#### 3.2

##### **cleansing**

wipe with dry or damp cloth to remove surface soiling

#### 3.3

##### **extremely flammable liquid**

liquid having a flash point < 23 °C and initial boiling point ≤ 35 °C

[SOURCE REGULATION (EC) No 1272/2008[4]]

#### 3.4

##### **flaming debris**

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

#### 3.5

##### **flammability**

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

#### 3.6

##### **flammable gas**

gas or gas mixture having a flammable range with air at 20 °C and a standard pressure of 101,3 kPa

[SOURCE REGULATION (EC) No 1272/2008[4]]

#### 3.7

##### **flammable liquid**

liquid having a flash point ≥ 23 °C and ≤ 60 °C

[SOURCE REGULATION (EC) No 1272/2008[4]]

#### 3.8

##### **flowing elements**

loosely hanging elements having the ability to flow like hair, to hang closely to the shape of the head and continue to move on their own after the head is rotated then stopped