

SLOVENSKI STANDARD SIST EN 71-2:2011

01-oktober-2011

Nadomešča: SIST EN 71-2:2006+A1:2007

Varnost igrač - 2. del: Vnetljivost

Safety of toys - Part 2: Flammability

Sicherheit von Spielzeug - Teil 2: Entflammbarkeit

iTeh STANDARD PREVIEW Sécurité des jouets - Partie 2: Inflammabilité (standards.iteh.ai)

Ta slovenski standard je istoveten z:IST ENEN.71-2:2011

https://standards.iteh.ai/catalog/standards/sist/084c745a-71b9-476e-9113-

<u>ICS:</u>

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

SIST EN 71-2:2011

en,fr,de



iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 71-2:2011

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 71-2

July 2011

ICS 13.220.40; 97.200.50

Supersedes EN 71-2:2006+A1:2007

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.

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, Slovania, Spain, Sweden, Switzerland and United Kingdom.

(standards.iteh.ai)

<u>SIST EN 71-2:2011</u> https://standards.iteh.ai/catalog/standards/sist/084c745a-71b9-476e-9113-361a8e920406/sist-en-71-2-2011



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2011 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 71-2:2011: E

Contents

Introduction	4		
Introduction			
1 Scope (see A.2)	7		
2 Normative references	8		
3 Terms and definitions	8		
4 Requirements			
4.1 General requirements (see A.3)			
4.2 Toys to be worn on the head (see A.4)			
 4.2.1 General			
free-hanging ribbons, paper, cloth strands or other flowing elements), which protrude 50			
mm or more from the surface of the toy			
4.2.3 Beards, moustaches, wigs, etc., made from hair, pile or material with similar features (e.g.			
free-hanging ribbons, paper, cloth strands or other flowing elements), which protrude			
less than 50 mm from the surface of the toy			
4.2.4 Full or partial moulded head masks	11		
4.2.5 Flowing elements of toys to be worn on the head (except those covered by 4.2.2 and			
4.2.3), hoods, head-dresses, etc. and masks not covered by 4.2.4 which partially or fully			
cover the head (e.g. fabric and cardboard masks, eye masks, face masks), but excluding those items covered by 4.3	4.4		
4.3 Toy disguise costumes and toys intended to be worn by a child in play (see A.5)			
 4.4 Toys intended to be tentered by a child: (see Ac) ds/sist/084c745a-71h9-476c-9113- 	11		
4.5 Soft-filled toys (see A.7)	11		
5 Test methods 5.1 General			
5.1.1 Test burner			
5.1.2 Conditioning and test chamber.			
5.1.3 Test flame			
5.2 Test relating to beards, moustaches, wigs, etc., made from hair, pile or material with			
similar features (e.g. free-hanging ribbons, paper, cloth strands or other flowing			
elements), which protrude 50 mm or more from the surface of the toy			
5.2.1 Test flame			
5.2.2 Test burner position5.2.3 Test performance			
 5.2.3 Test performance	12		
similar features (e.g. free-hanging ribbons, paper, cloth strands or other flowing			
elements), which protrude less than 50 mm from the surface of the toy, and full or partial			
moulded head masks (see A.8)	13		
5.3.1 Test flame			
5.3.2 Test burner position			
5.3.3 Test performance			
5.4 Test relating to flowing elements of toys to be worn on the head (except those covered by			
4.2.2 and 4.2.3), hoods, head-dresses, etc. and masks not covered by 4.2.4 which partially or fully cover the head (e.g. fabric and cardboard masks, eye masks, face masks), toy	/		
disguise costumes and toys intended to be entered or worn by a child (see A.9)	13		
	13		
5.4.1 Preparation of test sample	14 15		

5.4.5	Test performance	15
5.4.6	Results	16
5.5	Test for soft-filled toys	16
5.5.1	Test flame	
5.5.2	Test burner position	16
5.5.3	Test performance	16
Annex	A (informative) Background and rationale for this European Standard	17
A.1	General	
A.2	Scope	
A.3	General requirements (see 4.1)	17
A.4	Toys to be worn on the head (see 4.2)	
A.5	Toy disguise costumes and toys intended to be worn by a child in play (see 4.3)	18
A.6	Toys intended to be entered by a child (see 4.4)	18
A.7	Soft-filled toys (see 4.5)	
A.8	Test relating to full or partial moulded head masks (see 5.3)	18
A.9	Test relating to toy disguise costumes and toys intended to be entered by a child (see 5.4)	19
Annex	B (informative) Significant technical changes between this European Standard and the previous version	20
Annex	ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives	21
Bibliog	raphy	22
Sisilog	~~;,	

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 71-2:2011

https://standards.iteh.ai/catalog/standards/sist/084c745a-71b9-476e-9113-361a8e920406/sist-en-71-2-2011

Foreword

This document (EN 71-2:2011) 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 January 2012, and conflicting national standards shall be withdrawn at the latest by January 2012.

This document supersedes EN 71-2:2006+A1:2007.

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

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.

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

361a8e920406/sist-en-71-2-2011

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

- Part 1: Mechanical and physical properties https://standards.iteh.ai/catalog/standards/sist/084c745a-71b9-476e-9113-
- 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, CR 14379:2002, Classification of toys Guidelines,
- CEN Technical Report CEN/TR 15071:2005, Safety of toys National translations of warnings and instructions for use in EN 71, and
- CEN Technical Report CEN/TR 15371:2009, 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

iTeh STANDARD PREVIEW (standards.iteh.ai)

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

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. iTeh STANDARD PREVIEW
- NOTE Additional requirements for flammability of electric toys are specified in EN 62115.

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

3.3 hair

(standards.iteh.ai)

slender flexible fibres intended to represent human or animal hair SIST EN 71-2:2011

3.4

https://standards.iteh.ai/catalog/standards/sist/084c745a-71b9-476e-9113-361a8e920406/sist-en-71-2-2011

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 ≥ 23 °C and ≤ 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 ≤ 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 AARD PREVER

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 soak washed. 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;