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Varnost igrač - 8. del: Igrače za prostočasne aktivnosti za domačo uporabo

Safety of toys - Part 8: Activity toys for domestic use

Sicherheit von Spielzeug - Teil 8: Aktivitätsspielzeug für den häuslichen Gebrauch

Sécurité des jouets - Partie 8 : Jouets dactivité à usage familial

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Safety of toys - Part 8: Activity toys for domestic use

Sécurité des jouets - Partie 8 : Jouets d¿activité à usage familial

Sicherheit von Spielzeug - Teil 8: Aktivitätsspielzeug für den häuslichen Gebrauch

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 52.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.



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

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European foreword

This document (prEN 71-8:2024) has been prepared by Technical Committee CEN/TC 52 "Safety of toys", the secretariat of which is held by DS.

This document is currently submitted to CEN Enquiry.

This document will supersede EN 71-8:2018.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

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

This document constitutes the eighth part of the EN 71 series of standards on safety of toys. It should be read in conjunction with Part 1.

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 (this document);
- 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;
- Part 15: Formamide in foam toy materials (content) (under development);
- Part 16: Certain chlorinated phosphorus flame retardants (TCEP, TCPP, TDCP) in toy materials (under development);
- Part 17: Certain isothiazolinones (MIT, CIT, BIT) in aqueous toy materials (under development);

- *Part 18: Phenol in aqueous (content) and polymeric (migration) toy materials* (under development);
- Part 19: Migration of bisphenol A from toy materials (under development);
- Part 20: Microbiological safety of toys containing accessible agueous media (under development).

It is up to the user of the standard to determine whether or not a toy is included in the scope of several of the above parts of the EN 71 series, and to apply each applicable standard accordingly. Normative references from one part of the EN 71 series to another, are therefore normally not provided in the individual parts.

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

- CEN/TR 15071, Safety of toys National translations of warnings and instructions for use in the EN 71 series,
- CEN/TR 15371 (parts 1 and 2), Safety of toys Interpretations,
- CEN/TR 16918, Safety of toys Children's mouthing behaviour in contact with toys,
- CEN/TR 17695, Safety of toys Mechanical and physical properties Guidance on categorization of projectile toys within EN 71-1,
- CEN/TS 17973, Safety of toys Categorization of slime type materials, and
- CEN ISO/TR 8124-8, Safety of toys Part 8: Age determination guidelines.

NOTE 2 Words in *italics* (apart from document titles) are defined in Clause 3 (Terms and definitions).

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1 Scope

This document specifies requirements and test methods for *activity toys*.

NOTE 1 *Activity toys* are often attached to or incorporating a *crossbeam* and often intended to bear the mass of one or more children.

This document also specifies requirements for:

- separately sold accessories for, and components of activity toys;
- separately sold swing elements that are ready for use on or in combination with an *activity toy*;
- construction packages for *activity toys* including components used to build *activity toys* according to a scheduled building instruction.

The scope of this document excludes:

- playground equipment intended for public use dealt with in the EN 1176 series;
- bow-mounted rocking activity toys such as rocking horses and similar toys, which are covered by specific requirements in EN 71-1:2014+A1:2018;
- toy pools with maximum depth of water over 400 mm measured, between the overflow level and the deepest point within the pool;
 - NOTE 2 For information regarding the classification of pools as toys see European Commission guidance document No. 8 on the application of the Directive 2009/48/EC on the safety of toys Pools [1].
- pools with maximum depth of water over 400 mm measured, between the overflow level and the deepest point within the pool, without play elements covered e.g. by the EN 16582 series or EN 16927.
- NOTE 3 There is an enhanced risk of drowning in toy pools where the depth of water is in excess of 400 mm.
- trampolines for domestic use dealt with in EN 71-14;
- powered blowers used to continuously inflate inflatable activity toys.
 - NOTE 4 Powered blowers used to continuously inflate *inflatable activity toys* are considered to be a household appliance and covered by requirements given in EN 60335-2-80.

See also A.1.

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 71-1:2014+A1:2018, Safety of toys — Part 1: Mechanical and physical properties

EN ISO 7010:2020, Graphical symbols — Safety colours and safety signs — Registered safety signs (ISO 7010:2019, Corrected version 2020-06)

EN ISO 21920-2:2022, Geometrical product specifications (GPS) — Surface texture: Profile — Part 2: Terms, definitions and surface texture parameters (ISO 21920-2:2021, Corrected version 2022-06)

3 Terms and definitions

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

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

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

3.1

activity toy

toy for domestic use, in which the support structure remains stationary while the activity is taking place and which is intended for the performance by a child of any of the following activities: climbing, jumping, swinging, sliding, rocking, spinning, paddling, crawling and creeping, or any combination thereof

Note 1 to entry: Examples of such toys are *swings*, *slides*, carousels, climbing frames, rigid playhouses, paddling pools and inflatable *activity toys*. In contrast, ride-on vehicles are not considered as *activity toys*.

3.2

anchor

device used to fix an activity toy to the standing surface

3.3

attachment slide

slide for which access to the starting section is possible only by passing via other equipment or parts of equipment

Note 1 to entry: Such equipment includes climbing nets, bridges, *platforms*, inclined planes, other climbing devices.

[SOURCE: EN 1176-3:2017, 3.3]

3.4

barrier

device intended to prevent the user from falling and from passing beneath

[SOURCE: EN 1176-1:2017+A1:2023, 3.24]

3.5

collapse

sudden or unexpected folding of a structure

[SOURCE: EN 71-1:2014+A1:2018, 3.12]

3.6

constant-air inflatable activity toy

inflatable activity toy, relying on a continuous supply of air to maintain its shape

3.7

contained-air inflatable activity toy

inflatable activity toy, that is inflated by filling with air which is contained with a closure(s) in order to maintain its shape

3.8

crossbeam

bar or beam which forms a main load bearing part of certain activity toys (see Figure 4)

3.9

declined plane

surface which could be used for gliding downward in a sitting or lying position

3.10

entrapment

hazard presented by a situation in which a body, part of a body, or clothing is entrapped

3.11

exposed edge

edge intended to be touched and/or gripped by a child during the use of an activity toy

Note 1 to entry: *Exposed edges* are commonly found on doors, windows, shutters, ladders, steps, *handrails*, retaining sides for *slides* and seats.

3.12

forced movement

movement of the user caused by the equipment (e.g. swinging, sliding, carousel rotation etc.) which, once started, cannot be totally controlled by the user

Note 1 to entry: Falls are not considered *forced movement* as they are not imposed on the user by the equipment but occur for other reasons.

[SOURCE: EN 1176-1:2017+A1:2023, 3.34, modified — An original Note 2 to entry is not reproduced here.]

3.13

free height of fall

greatest vertical distance from the clearly intended body support to the impact area below

[SOURCE: EN 1176-1:2017+A1:2023, 3.7, modified — An original Note 1 to entry is not reproduced here.]

3.14

free space

space in, on or around the *activity toy* that can be occupied by a user undergoing a *forced movement* caused by use of the equipment (e.g. swinging, sliding, rocking, revolving)

Note 1 to entry: The definition of *free space* does not include the three-dimensional space in which a falling movement takes place.

3.15

grasp

holding of the hand round part of the circumference of a support

Note 1 to entry: See Figure 1.

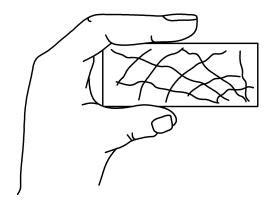


Figure 1 — Grasp

[SOURCE: EN 1176-1:2017+A1:2023, 3.17]

3.16 grip

holding of the hand round the entire circumference of a support

Note 1 to entry: See Figure 2.

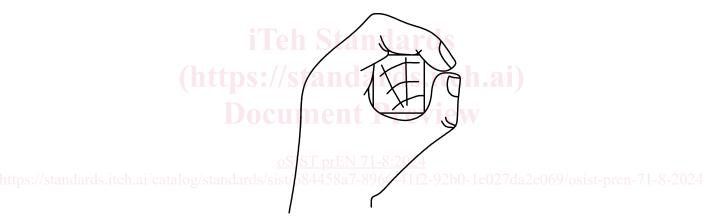


Figure 2 — Grip

[SOURCE: EN 1176-1:2017+A1:2023, 3.16]

3.17

handrail

rail intended to assist the user to balance

[SOURCE: EN 1176-1:2017+A1:2023, 3.22]

3.18

inflatable activity toy

activity toy, with a structure made of flexible material, inflated by air, intended for children to play on or in, excluding *paddling pools* and toys intended to be used on or in water

EXAMPLE Bouncy castle, inflatable *slides* (see Figure 3).

Note 1 to entry: There are two types of *inflatable activity toys: contained-air inflatable activity toys* and *constant-air inflatable activity toys*.

Note 2 to entry: *Inflatable activity toys* can also include a *paddling pool* element.

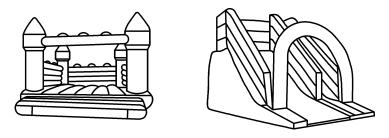


Figure 3 — Examples of inflatable activity toys

3.19

paddling pool

toy pool with a maximum depth of water of 400 mm measured between the overflow level and the deepest point within the pool

Note 1 to entry: Examples of typical *paddling pools* can be found in the European Commission Guidance Document No. 8 on the application of the Directive 2009/48/EC on the safety of toys – Pools [1].

3.20

platform

raised surface where one or more users can stand without the need of hand support

Note 1 to entry: The classification of a *platform* will vary depending on its function. Surfaces where the user is only able to stand with the aid of hand supports are not classified as *platforms*. Exclusion of surfaces from the definition can be achieved by a number of means, e.g.:

- reducing the surface area to restrict free movement and encourage holding on;
- incline the surface to encourage holding on;
- introducing movement to the surface to encourage holding on. 2024

[SOURCE: EN 1176-1:2017+A1:2023, 3.21, modified — The wording of the Note 1 to entry was modified.]

3.21

resilient material

material which is capable of regaining its original shape, position or absorbing shock after bending, stretching, compression, impact or other actions

3.22

slide

structure with inclined surface(s) on which the user slides in a defined track

Note 1 to entry: Inclined planes, designed primarily for other purposes, such as roofs, do not constitute *slides*.

3.23

suspension connector

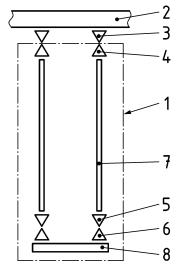
device which forms the direct contact between a *crossbeam* and the means of suspension (see Figure 4)

3.24

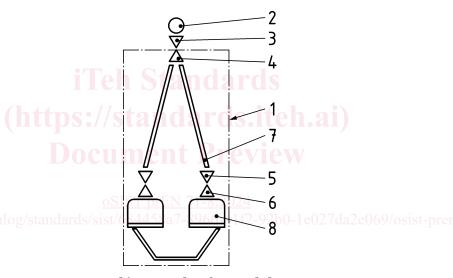
swing

structure incorporating a *crossbeam, suspension connectors* and a swing device with swing element, suspension coupling and means of suspension

Note 1 to entry: Examples of swings are shown in Figure 4.



a) Example of a flat seat



b) Example of a gondola

Key

- 1 swing device
- 2 crossbeam
- 3 upper suspension connector
- 4 upper suspension coupling
- 5 lower suspension connector
- 6 lower suspension coupling
- 7 means of suspension
- 8 swing element (e.g. seat, rings, bar, gondola)

NOTE A swing device can include one or more footrests. Footrests are considered as parts of the swing elements.

Figure 4 — Diagrammatic representation of examples of swings

4 Requirements

4.1 General (see A.2)

4.1.1 Assembly

Activity toys shall be assembled using self-locking fasteners which, to avoid unintentional disassembling due to dynamic forces during use, may include spring washers and/or self-locking nuts.

NOTE Self-tapping screws or nails are considered as self-locking fasteners.

4.1.2 Static strength

Activity toys other than swings and paddling pools, when tested according to 6.3.2 (strength of activity toys other than swings and paddling pools), shall not *collapse* such that they do not continue to comply with the relevant requirements of EN 71-1:2014+A1:2018.

NOTE Static strength requirements for *swings* are given in 4.6.2 and for *paddling pools* in 4.9.1.

4.1.3 Maximum height (see A.3)

When measured from the ground, there shall be no part of the *activity toy* where the child is able to climb, sit or stand above a height of 2 500 mm.

4.1.4 Corners and edges (see A.4)

Exposed edges shall be rounded.

Corners and *exposed edges* on moving parts shall have a minimum radius of 3 mm. This requirement does not apply to swing elements with a mass of 1 000 g or less, the corners and edges of which shall be rounded.

4.1.5 Protruding parts

The requirements in 4.1.5 apply to protrusions situated on accessible moving parts and in places where the user is running, sliding, climbing, sitting or lying down.

There shall be no protruding nails, projecting wire rope terminations or pointed or sharp-edged components. Protruding bolt threads within any accessible part of the equipment shall be permanently covered, e.g. dome headed nuts. Nuts and bolt heads that project less than 8 mm shall be free from burrs.

NOTE 1 Figure 5 shows examples of protection for nuts and bolts.

Corners, edges and projecting parts within the space occupied by the user that protrude more than 8 mm, and which are not shielded by adjacent areas that are not more than 25 mm from the end of the projecting part, shall be rounded off. The minimum radius of the curve shall be 3 mm.

NOTE 2 This requirement is intended only to prevent injuries caused by unintended contact with components.

Corners, edges and projections with a radius less than 3 mm may be in other accessible parts of the equipment only if they are not sharp.