

Toy Safety- Requirements under 2009/48/EC

What is needed to put new toys on the market?

For most toys compliance with the requirements in the below standards has been the main process followed to ensure a safe product.

- EN 71-1 + A3: 2014
 Physical and Mechanical properties
- EN 71-2: 2011 + A1: 2014 Flammability
- EN 71-3: 2013
 Migration of certain elements

For specific toys the following might also be required:

- EN 71-4:2013 Experimental sets for chemistry and related activities
- EN 71-5:2013 Chemical toys (sets) other than experimental sets
- EN 71-7:2014 Finger paints
- EN 71-8:2011 Activity toys for domestic use
- EN 71-9:2005 Organic chemical compounds
- EN 71-12: 2013 N-Nitrosamines and N-nitrosatable substances
- EN 71-13: 2014 Olfactory board games, cosmetic kits, and gustative games
- Toys for Under 3's and other toys intended to be placed in the mouth need to comply with 0.1 mg/l migration limits for Bisphenol A and the 5 mg/kg content limit for TCEP, TCPP, and TDCP (applies from Dec 2015).

Also remember you need to be able to demonstrate compliance with:

EU REACH (Registration, Evaluation and Authorisation of CHemicals regulation) Regulation (EC) 1907/2006, for SVHC (candidate)

list is currently at 161 chemicals) and applicable Annex XVII substances. Common substances to be assessed for in toys include: Cadmium, Phthalates, Azo Dyes, Nickel and PAH's (Polycyclic hydrocarbons).

- Ban on substances classified as CMR (Carcinogenic, Mutagenic, or toxic for Reproduction) under Regulation (EC) No 1272/2008 on the classification, labelling and packaging (CLP).
- 55 allergenic fragrances may not be used in toys, only technically unavoidable traces are allowed up to 0.01% / 100 ppm
- 11 allergenic fragrances in shall be listed on toys at concentration exceeding 0.01% / 100 ppm
- Packaging and packaging waste Directive 94/62/EC

Also remember you need to be able to demonstrate compliance with - depending on the type of toy:

- Cosmetic toys shall comply with EU Cosmetic Regulation No 1223/2009
- Toys with electrical features may need to comply with:
 - RoHS (Directive 2011/65/on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment),
 - Batteries and Accumulators (Directive 2006/66/EC),
- WEEE (Directive 2012/19/EU of Waste Electrical and Electronic Equipment (recast),
- EMC (Directive 2004/108/EC relating to ElectroMagnetic Compatibility), and



- R&TTE Directive (for RC cars, for instance). The current directive 1999/5/EC is being replaced by 2014/53/EU as from 13/06/16.
- Toys that are likely to come into contact with food may need to comply with:
 - Regulations (EC) 1935/2004 on Materials and Articles Intended to Come into Contact with Food
 - Regulation (EU) No 10/2011 on Plastic Materials and Articles Intended to come into Contact with Food
- Toys containing liquid: EC-type approval protocol No. 2 Microbiological safety of toys containing aqueous media Rev. 2

In addition, manufacturers need to ensure that a **Safety Assessment** is carried out on each toy and draw up **EC Declaration of Compliance**. All technical documentation must be kept for 10 years.

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Recent up-dates

EN 71-1: 2014

This is mainly an administrative change because there is a requirement that there can only be 3 amendments per standard. There is a small clarification about the method of testing for self-retracting cords; that they should not retract the cord more than 6 mm (previously there was no allowance).

EN 71-3:2013 A1 + A1: 2014

This amendment changes the pH requirement of the solution. This has become a tighter range than previously and so this should enable better consistency of testing procedures.

EN 71-14: 2014

Trampolines for domestic use. This is the first publication of the standard. It covers the safety requirements for

trampolines, their access and enclosures for above ground level by one person at a time, it is applicable for both indoor and outdoor trampolines. It does not include inflatable trampolines, fitness trampolines and those for use in public playgrounds.

These standards have yet to be harmonized and so the previous versions offer the presumption of conformity for **EN 71-1** and **EN 71-3**.

On the horizon - Various pieces of legislation, standards or guidance that are currently in draft form

A draft exists to amend the Annex II to the Toy Directive regarding the migration limits for lead. This will significantly lower the limits as per the table below and need to be incorporated in **EN 71-3**.

	Cat 1 (dry, brittle, powder like or pliable)	Cat 2 (liquid or sticky)	Cat 3 (scraped off)
Current Limits	13.5 mg/kg	3.4 mg/kg	160 mg/kg
Drafts	2.0 mg/kg	0.5 mg/kg	23 mg/kg

A separate draft is being discussed to amend Appendix C to Annex II to introduce new requirements for toys which are intended for children under 36 months and other toys intended to be placed in the mouth.

The limits under discussion are listed below:

Substance	CAS No	Limit value
Phenol	108-95-2	5 mg/l (migration limit) as a monomer 10 mg/kg (content limit) as a preservative Compliance with both limits is to be deter- mined in accordance with the methods laid down in EN 71-10:2005 and EN 71-11:2005 .
Formamide	75-12-7	20 μ g/m3 (emission limit) after a maximum of 28 days from commencement of the emission testing of foam toy materials
1,2-benzisothiazol-3(2H)-one	2634- 33-5	5 mg/kg (content limit)
reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	55965- 84-9	1 mg/kg (content limit)
5-Chloro-2-methyl-isothiazol-3(2H)-one	26172- 55-4	0,75 mg/kg (content limit)
2-methylisothiazol-3(2H)-one	2682- 20-4	0,25 mg/kg (content limit)

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