



**SLOVENSKI STANDARD**  
**oSIST prEN 71-18:2023**

**01-december-2023**

---

**Varnost igrač - 18. del: Fenol v materialih za vodne igrače in igrače iz polimerov**

Safety of toys - Part 18: Phenol in aqueous and polymeric toy materials

Sicherheit von Spielzeug - Teil xx: Phenol in wässrigem (Gehalt) und polymerem (Migration) Spielzeugmaterial

Sécurité des jouets - Partie 18 : Phénol dans les matériaux-jouets aqueux et polymères

**Ta slovenski standard je istoveten z: prEN 71-18**

---

**ICS:**

97.200.50 Igrače

Toys

**oSIST prEN 71-18:2023**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 71-18**

October 2023

---

ICS

English Version

## Safety of toys - Part 18: Phenol in aqueous and polymeric toy materials

Sicherheit von Spielzeug - Teil xx: Phenol in wässrigem (Gehalt) und polymerem (Migration) Spielzeugmaterial

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.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

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.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

<https://standards.iteh.ai/catalog/standards/sist/91355e50-9acc-495f-b4a5-aed3b5f4f82c/osist-pren-71-18-2023>



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

---

<b>Contents</b>	<b>Page</b>
European foreword .....	3
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	6
4 Requirements.....	6
5 Principle.....	7
5.1 Migration method.....	7
5.2 Content method.....	7
6 Reagents and apparatus.....	7
6.1 Reagents.....	7
6.2 Standards.....	7
6.3 Apparatus .....	8
7 Sample preparation .....	9
7.1 Migration method .....	9
7.1.1 General.....	9
7.1.2 Sample area calculation.....	9
7.1.3 Migration.....	9
7.2 Content method .....	10
8 Method of analysis.....	10
8.1 General.....	10
8.2 HPLC chromatographic conditions.....	10
8.3 MS/MS conditions.....	11
8.4 DAD and FLD detection.....	11
9 Method performance .....	12
9.1 Limit of quantification .....	12
9.2 Precision .....	12
10 Calculation of the result.....	13
10.1 Identification of phenol .....	13
10.2 Evaluating the concentration of phenol using HPLC-MS/MS .....	13
10.3 Evaluating the concentration of phenol using HPLC-DAD/FLD .....	13
10.4 Migration method .....	13
10.5 Content method.....	13
11 Test report.....	14
Annex A (Informative) Background and rationale — Extraction and migration conditions	15
Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2009/48/EC aimed to be covered .....	16
Bibliography .....	17

## European foreword

This document (prEN 71-18:2023) 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 the CEN Enquiry.

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

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

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

This document constitutes the 18th 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 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 (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) (the present document)*

**prEN 71-18:2023 (E)**— *Part 19: Migration of bisphenol A from toy materials* (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 deliverables 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 (*all parts*), *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 categorisation of projectile toys within EN 71-1*,
- CEN/TS 17973, *Safety of toys - Categorization of slime type materials* (under development), 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).

**iTeh Standards**  
**(<https://standards.iteh.ai>)**  
**Document Preview**

[oSIST prEN 71-18:2023](https://standards.iteh.ai/catalog/standards/sist/91355e50-9acc-495f-b4a5-aed3b5f4f82c/osist-pren-71-18-2023)

<https://standards.iteh.ai/catalog/standards/sist/91355e50-9acc-495f-b4a5-aed3b5f4f82c/osist-pren-71-18-2023>