

MÄNGUASJADE OHUTUS. OSA 18: FENOOLI SISALDUS
VEEPÕHISTES JA MIGRATSIOON POLÜMEERSETES
MÄNGUASJADE MATERJALIDES

Safety of toys - Part 18: Phenol in aqueous (content)
and polymeric (migration) toy materials

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>See Eesti standard EVS-EN 71-18:2024 sisaldab Euroopa standardi EN 71-18:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.12.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p> | <p>This Estonian standard EVS-EN 71-18:2024 consists of the English text of the European standard EN 71-18:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 18.12.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p> |
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English Version

Safety of toys - Part 18: Phenol in aqueous (content) and polymeric (migration) toy materials

Sécurité des jouets - Partie 18 : Phénol dans les matériaux-jouets aqueux (teneur) et polymères (migration)

Sicherheit von Spielzeug - Teil 18: Phenol in wässrigem (Gehalt) und polymerem (Migration) Spielzeugmaterial

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European foreword

This document (EN 71-18:2024) 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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 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.

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

This document constitutes the 18th 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 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* (this document);
- *Part 19: Migration of bisphenol A from toy materials*;
- *Part 20: Microbiological safety of toys containing accessible aqueous 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 deliverables have been published:

- CEN/TR 15071, *Safety of toys — National translations of warnings and instructions for use in the EN 71 series*;
- the CEN/TR 15371 series, *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*; and
- CEN ISO/TR 8124-8, *Safety of toys — Part 8: Age determination — First age grade for the appropriate play of toys (ISO/TR 8124-8)*.

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

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

Introduction

According to article 46 of Directive 2009/48/EC on the safety of toys [1] the “Commission may adopt specific limit values for chemicals used in toys intended for use by children under 36 months or in other toys intended to be placed in the mouth”.

In May 2017, the European Commission amended Appendix C to Annex II to this Directive accordingly and adopted specific limit values for phenol in toys (see Commission Directive (EU) 2017/774 [2]). The limit values take into account the SCHER Opinion on “CEN's response to the opinion of the CSTEE on the assessment of CEN report on the risk assessment of organic chemicals in toys” [3].

This document provides test methods to check compliance with these limit values.

WARNING — The application of the test method specified in this document can involve hazardous materials, operations and equipment. The document does not purport to address all of the safety or environmental problems associated with its use.

1 Scope

This document specifies requirements and test methods for determining the concentration of phenol in *aqueous toy materials* and for migration of phenol from polymeric toy materials. This document is applicable to toys intended for use by children under 36 months or other toys intended to be placed in the mouth.

NOTE The European Commission Guidance Document No 11 on the Application of Directive 2009/48/EC on the Safety of Toys [4] provides guidelines to help on the classification of toys intended for children under 36 months of age or of 36 months and over.

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 3696:1995, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*

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

aqueous toy material

toy material formulated with water

Note 1 to entry: Formulated with water means the material has added water or water containing ingredients during the manufacturing process and excludes materials that have absorbed water, unintentionally.

3.2

sample

part of the toy material subject to testing

Note 1 to entry: In the context of the extraction method (which is applied to *aqueous toy material*), *sample* is understood as aliquot from an *aqueous toy material* subject to testing.

Note 2 to entry: A *sample* can consist of more than one material if the materials cannot be separated (e.g. coatings on a base material).

4 Requirements

The migration of phenol from toy materials shall not exceed 5 mg/l when tested according to the method specified in 7.1 and Clause 8.

The content of phenol in *aqueous toy materials* shall not exceed 10 mg/kg when tested according to the method specified in 7.2 and Clause 8.

NOTE The limit values correspond to the limit values specified in Directive 2009/48/EC [1], which were introduced by Commission Directive (EU) 2017/774 [2].