

**Mänguasjade ohutus. Osa 9:  
Orgaanilised keemilised ühendid.  
Nõuded**

Safety of toys - Part 9: Organic chemical compounds  
- Requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 71-9:2005 sisaldab Euroopa standardi EN 71-9:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.04.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 71-9:2005 consists of the English text of the European standard EN 71-9:2004.</p> <p>This document is endorsed on 28.04.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This Part 9 of the European Standard EN 71 for safety of toys specifies requirements for the migration or content of certain hazardous organic chemical compounds from/in toys and toy materials by the following exposure routes: - mouthing - ingestion - skin contact - eye contact - inhalation when used as intended or in a foreseeable way, bearing in mind the normal behaviour of children and the function and design of the toy.</p>	<p><b>Scope:</b></p> <p>This Part 9 of the European Standard EN 71 for safety of toys specifies requirements for the migration or content of certain hazardous organic chemical compounds from/in toys and toy materials by the following exposure routes: - mouthing - ingestion - skin contact - eye contact - inhalation when used as intended or in a foreseeable way, bearing in mind the normal behaviour of children and the function and design of the toy.</p>
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English version

## Safety of toys - Part 9: Organic chemical compounds - Requirements

Sécurité des jouets - Partie 9: Composés chimiques  
organiques - Exigences

Sicherheit von Spielzeug - Teil 9: Organisch-chemische  
Verbindungen - Anforderungen

This European Standard was approved by CEN on 15 November 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 71-9:2005) has been prepared by Technical Committee CEN/TC 52 "Safety of Toys", the secretariat of which is held by DS.

This document 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 document.

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 August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

This standard constitutes part 9 of the European Standard on Safety of Toys.

This part should be read in conjunction with parts 10 and 11.

This document defines contact routes and specifies limits for the migration or content of certain chemical compounds in toys.

This document contains three annexes:

- Annex A (informative) Rationale
- Annex B (informative) Conformity assessment
- Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

The document EN 71 for 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 6: *Graphical symbols for age warning labelling*
- Part 7: *Finger paints – Requirements and test methods*
- Part 8: *Swings, slides and similar activity toys for indoor and outdoor family 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*

The documents EN 71-9, prEN 71-10 and prEN 71-11 were mandated by the European Commission (M/229) to address the risks presented by organic compounds in toys by taking into account the potential exposure and toxicological effects of those substances considered to present the greatest risk to health.

This document gives requirements for organic compounds in certain toys and toy materials. In drafting the document, CEN/TC 52 considered the risks associated with more than 650 organic compounds. It was recognized that not all potentially hazardous organic compounds could be addressed. The Commission further restricted the Mandate to substances classified as dangerous under Council Directive 67/548/EEC. This document, therefore, supports but does not reduce the responsibility of toy manufacturers, importers and suppliers for ensuring that the use of other substances will not endanger the health whilst playing with toys as intended or in a reasonably foreseeable way. In addition, there should be no exposure to children from toys, in amounts which may harm their health, of organic chemical substances which are classified by other relevant statutes as carcinogenic, mutagenic or toxic for reproduction and for which no requirements are specified in this document.

Future editions of this document will address additional organic compounds. It might be useful for manufacturers of toys to consider the risk assessments carried out during the drafting of this document and published as part of a CEN report which supports the standard. Users of this document are reminded that compliance with the standard can only provide presumption of conformity with the essential safety requirements of the Toys Safety Directive in respect of the substances addressed.

This part should be read in conjunction with prEN 71-10, which describes sample preparation and extraction procedures, and prEN 71-11, which specifies methods of analysis.

At the date of publication, the standard does not specify requirements for chemical compounds which are prohibited in toys by Council Directive 76/769/EEC of 27<sup>th</sup> July 1976, as amended, on restrictions on the marketing and use of certain dangerous substances and preparations.

This document takes into account the opinion of the Toxicology Section of the Scientific Advisory Committee published in 1992 (EUR 13976) which recommended that certain groups of chemical compounds used in toys and toy materials need to be given special attention. In drafting this document CEN/TC 52 has considered organic chemicals that can be classified within the following groups:

- Solvents
- Preservatives
- Plasticisers (excluding phthalate plasticisers)<sup>1</sup>
- Flame retardants
- Monomers

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<sup>1</sup> Phthalate plasticisers were specifically excluded from the scope of mandate M/229.

- Biocides (wood preservatives)
- Processing aids
- Colouring agents

During the development of this document, CEN/TC 52 has considered the requirements set out in Council Directive 82/711/EEC as amended and its supporting standards.

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## 1 Scope

This Part 9 of the document EN 71 for safety of toys specifies requirements for the migration or content of certain hazardous organic chemical compounds from/in certain toys and toy materials (see Table 1) by the following exposure routes:

- mouthing
- ingestion
- skin contact
- eye contact
- inhalation

when used as intended or in a foreseeable way, bearing in mind the normal behaviour of children and the function and design of the toy.

This document does not contain requirements for chemical toys, experimental sets or finger-paints, which are addressed by other parts of EN 71.

Packaging materials used with toys are not within the scope of the document unless they form part of the toy or have intended play value.

## 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 71-1:1998, *Safety of toys - Part 1: Mechanical and physical properties*

EN 71-5, *Safety of toys – Part 5: Chemical toys (sets) other than experimental sets*

prEN 71-10:, *Safety of toys – Organic chemical compounds – Sample preparation and extraction*

prEN 71-11, *Safety of toys – Organic chemical compounds – Methods of analysis*

EN 645, *Paper and board intended to come into contact with foodstuffs – Preparation of a cold water extract*

EN 717-3, *Wood-based panels – Determination of formaldehyde release – Part 3: Formaldehyde release by the flask method*

EN 1541, *Paper and board intended to come into contact with foodstuffs - Determination of formaldehyde in an aqueous extract*

EN ISO 787-9, *General methods of test for pigments and extenders – Part 9: Determination of pH value of aqueous suspension (ISO 787-9:1981)*

EN ISO 14184-1, *Textiles – Determination of formaldehyde – Part 1: Free and hydrolysed formaldehyde (water extraction method) (ISO 14184-1:1998)*

## 3 Terms and definitions

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