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## Child care articles - General safety guidelines - Part 3: Mechanical hazards

Articles de puériculture - Conseils relatifs à la sécurité -  
Partie 3 : Dangers mécaniques

Artikel für Säuglinge und Kleinkinder -  
Sicherheitsleitfaden - Teil 3: Mechanische  
Gefährdungen

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## European foreword

This document (CEN/TR 13387-3:2023) has been prepared by Technical Committee CEN/TC 252 “Child care articles”, the secretariat of which is held by AFNOR.

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 supersedes CEN/TR 13387-3:2018.

This new edition of this Technical Report is a hazard-based Technical Report. The main changes compared to the previous edition are listed below:

- Mechanical hazards — Safety philosophy: addition of a new paragraph on new technologies;
- Hazard due to small components: Reworded;
- Footholds: Reworded.

The CEN/TR 13387 series, with the general title *Child care articles - General safety guidelines*, comprises the following five parts:

- *Part 1: Safety philosophy and safety assessment;*
- *Part 2: Chemical hazards;*
- *Part 3: Mechanical hazards;*
- *Part 4: Thermal hazards;*
- *Part 5: Product information.*

CEN/TR 13387-3 is intended to be used in conjunction with CEN/TR 13387-1.

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.

## 1 Scope

This document provides guidance information on mechanical hazards that should be taken into consideration when developing safety standards for child care articles. In addition, these guidelines can assist those with a general professional interest in child safety.

## 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.

ISO 4593, *Plastics — Film and sheeting — Determination of thickness by mechanical scanning*

## 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:

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

### 3.1

#### **mechanical hazards**

physical factors which may give rise to injury due to the mechanical properties of products/product parts

### 3.2

#### **reach envelopes**

age related physical data on the reach limits of the limbs of children in different postures

Note 1 to entry: See 5.2.

### 3.3

#### **ageing**

change of properties of the material due to exposure to environmental factors such as temperature, humidity, UV radiation, cleaning agents, etc.

### 3.4

#### **mechanical wear**

change of mechanical properties due to fatigue or repeated operation of devices, mechanisms and other parts of the product

## 4 Mechanical hazards — Safety philosophy

This clause addresses the most widely known mechanical hazards and is intended to provide guidance when drafting standards for child care articles.

Anthropometric data and information on the abilities of children related to risks are given in CEN/TR 13387-1:2018, Annex A. When using these data for setting requirements, adequate safety margins should be considered. These data refer to static and not dynamic anthropometric data, therefore care should be taken if using these data for anything other than static situations when drafting standards.