TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CEN/TR 13387-3

July 2018

ICS 97.190

Supersedes CEN/TR 13387-3:2015

English Version

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

This Technical Report was approved by CEN on 16 March 2018. It has been drawn up by the Technical Committee CEN/TC 252.

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European foreword

This document (CEN/TR 13387-3:2018) 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 13387-3:2015.

This new edition of this Technical Report is a hazard based Technical Report. In comparison with the previous version, the main changes related to the section on Mechanical hazards are:

— Ageing and wear: Reworded;

— Accessibility of mechanical hazards: Reworded;

— Entrapment Hazards: Addition of a new finger probe and a hip probe;

— Hazards from moving parts: Moving parts separated into two main areas;

— Entanglement hazards: Improvement of the diagram for the ball and chain test; clarification of the clause for “Cords, ribbons and parts used as ties;

— Suffocation hazards: Clarification of the clause for “Non air-permeable packaging”;

— Hazardous edges and projections: Drawings deleted;

— Protective function: Addition of a hip probe;

— Footholds: Reworded.

The CEN/TR 13387 series comprises the following five parts:

— Safety philosophy and safety assessment (CEN/TR 13387-1);

— Chemical hazards (CEN/TR 13387-2);

— Mechanical hazards (CEN/TR 13387-3);

— Thermal hazards (CEN/TR 13387-4);

— Product information (CEN/TR 13387-5).

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

1 Scope

This document provides guidance information on mechnical 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.

CEN/TR 13387-1:2018, *Child use and care articles — General safety guidelines — Part 1: Safety philosophy and safety assessment*

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 terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://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