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Child care articles – General safety guidelines – Part 3: Mechanical hazards

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TECHNICAL REPORT

CEN/TR 13387-3

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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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SIS-CEN/TR 13387-3:2018 (E)

Contents	Page
European foreword.....	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Mechanical hazards — Safety philosophy	7
5 Accessibility of mechanical hazards.....	8
5.1 General.....	8
5.2 Accessibility areas	8
5.3 Product information	10
6 Entrapment hazards.....	11
6.1 Introduction	11
6.2 Entrapment of head and neck.....	12
6.2.1 Rationale	12
6.2.2 Terms and definitions related to entrapment hazards.....	12
6.3 Requirements	14
6.4 Test equipment.....	14
6.4.1 Probe philosophy	14
6.4.2 Hip probe.....	14
6.4.3 Small head probe.....	15
6.4.4 Large head probe	16
6.4.5 Template for partially bound and V shaped openings	17
6.4.6 Selection and use of probes	18
6.5 Test methodology.....	19
6.5.1 Feet first openings	19
6.5.2 Head first openings.....	19
6.5.3 Partially bound, V and irregular shaped openings	19
6.6 Entrapment of fingers.....	21
6.6.1 Rationale	21
6.6.2 Requirements	22
6.6.3 Test equipment.....	23
6.6.4 Test Methodology.....	24
6.7 Rationale for entrapment of limbs, feet and hands	24
7 Hazards from moving parts.....	24
7.1 Rationale	24
7.2 General.....	24
7.3 Shearing hazards.....	25
7.3.1 Requirements	25
7.3.2 Test equipment.....	25
7.3.3 Test method	25
7.4 Requirements for crushing hazards.....	26
8 Hazards with products designed to fold for storage and transportation.....	26
8.1 Rationale	26
8.2 Terms and definitions related to hazards with products designed to fold.....	26

- 8.3 Requirements..... 26
 - 8.3.1 General 26
 - 8.3.2 Unintentional release of locking mechanisms 27
 - 8.3.3 Test methodology 27
- 9 Hazards related to attachment mechanisms and opening and closing systems..... 27
 - 9.1 Rationale..... 27
 - 9.2 Requirement..... 27
 - 9.3 Test methodology 28
- 10 Entanglement hazards 28
 - 10.1 Snagging hazards 28
 - 10.1.1 Rationale..... 28
 - 10.1.2 Requirements..... 28
 - 10.1.3 Test Equipment 28
 - 10.1.4 Test Methodology for loop and mass..... 30
 - 10.2 Cords, ribbons and parts used as ties..... 31
 - 10.2.1 Rationale..... 31
 - 10.2.2 Requirements..... 31
 - 10.2.3 Test methodology 32
 - 10.3 Loops 32
 - 10.3.1 Rationale..... 32
 - 10.3.2 Requirements..... 32
 - 10.3.3 Test methodology 32
- 11 Choking hazards..... 33
 - 11.1 Introduction..... 33
 - 11.2 Hazard due to small components..... 33
 - 11.2.1 Rationale..... 33
 - 11.2.2 Requirements..... 33
 - 11.2.3 Test equipment (also used in 12.2.3) 34
 - 11.2.4 Test methodology (also in 12.2.4) 36
 - 11.3 Accessibility of filling materials 37
 - 11.3.1 Rationale..... 37
 - 11.3.2 Requirement..... 37
 - 11.3.3 Test equipment..... 37
 - 11.3.4 Test methodology 39
 - 11.4 Airway obstruction 39
 - 11.4.1 Rationale..... 39
 - 11.4.2 Protective mechanisms of the airway 40
 - 11.4.3 Requirements..... 41
 - 11.4.4 Test equipment..... 41
 - 11.4.5 Test methodology 42
- 12 Suffocation hazards..... 42
 - 12.1 Introduction..... 42
 - 12.2 Plastic decals and sheeting..... 43
 - 12.2.1 Rationale..... 43
 - 12.2.2 Requirements..... 43
 - 12.2.3 Determination of hazard..... 43
 - 12.2.4 Test equipment..... 44
 - 12.2.5 Test methodology 44
 - 12.3 Non air-permeable packaging..... 45
 - 12.3.1 Rationale..... 45
 - 12.3.2 Requirements - Packaging..... 45

SIS-CEN/TR 13387-3:2018 (E)

12.3.3	Test equipment.....	46
12.3.4	Test methodology.....	46
13	Ingestion hazards.....	46
13.1	Rationale	46
13.2	Ingestion of small components	46
13.2.1	Requirements	46
13.2.2	Test equipment (Also used in 12.2.3)	47
13.2.3	Test methodology.....	49
14	Hazardous edges and projections.....	50
14.1	Introduction	50
14.2	Edges.....	50
14.2.1	Rationale	50
14.2.2	Requirements - Edges on products and components.....	50
14.2.3	Test methodology.....	51
14.3	Rigid protruding parts	51
14.3.1	Rationale	51
14.3.2	Requirements.....	51
14.3.3	Test methodology.....	51
14.4	Points and wires.....	51
14.4.1	Rationale	51
14.4.2	Requirement.....	51
15	Structural integrity.....	51
15.1	Introduction	51
15.2	Material suitability	52
15.2.1	Rationale	52
15.2.2	Requirements	52
15.3	Strength and durability of the product	53
15.3.1	Rationale	53
15.3.2	Requirements	53
15.3.3	Test methodology.....	53
16	Protective function	53
16.1	Introduction	53
16.2	Barrier function.....	53
16.2.1	Rationale	53
16.2.2	Requirements.....	54
16.2.3	Test equipment - Hip probe.....	54
16.2.4	Test methodology.....	55
16.3	Restraint systems.....	55
16.3.1	Rationale	55
16.3.2	Terms and definitions related to restraint systems.....	55
16.3.3	Requirements	56
16.3.4	Test equipment.....	56
16.3.5	Test methodology.....	57
16.4	Footholds.....	58
16.4.1	Rationale	58
16.4.2	Requirements	58
16.4.3	Test equipment (Templates)	58
16.4.4	Determination of a foothold.....	59
16.4.5	Test methodology.....	60
17	Hazard associated with stability.....	63
17.1	Rationale	63

17.2 General requirement.....	63
Bibliography.....	64

SIS-CEN/TR 13387-3:2018 (E)

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 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.

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