

TEKSTIILIST LAPSEHOOLDUSTOOTED.
OHUTUSNÕUDED JA KATSEMEETODID LASTE
VÕREVOODITEKKIDELE. OSA 1: TEKK (VÄLJA ARVATUD
TEKIKOTID)

Textile child care articles - Safety requirements and test
methods for children's cot duvets - Part 1: Duvet
(excluding duvet covers)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16779-1:2018 sisaldab Euroopa standardi EN 16779-1:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 16779-1:2018 consists of the English text of the European standard EN 16779-1:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.08.2018.	Date of Availability of the European standard is 01.08.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 97.160, 97.190

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Textile child care articles - Safety requirements and test
methods for children's cot duvets - Part 1: Duvet
(excluding duvet covers)

Articles textiles de puériculture - Exigences de sécurité
et méthodes d'essai pour les couettes pour lit à nacelle
- Partie 1 : Couette (excluant les housses de couette)

Textile Artikel für Kleinkinder und Säuglinge -
Sicherheitstechnische Anforderungen und
Prüfverfahren für Kinderbettdecken - Teil 1:
Bettdecken (ausgenommen Bettbezüge)

This European Standard was approved by CEN on 8 February 2018.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Requirements and test methods.....	9
4.1 Design characteristics (see A.2).....	9
4.1.1 General.....	9
4.1.2 Cot duvet ensemble	9
4.1.3 Threads (including cot duvet seams).....	9
4.1.4 Labels.....	10
4.1.5 Embellishments	10
4.1.6 Fabrics and filling materials	10
4.1.7 Slide fasteners	10
4.2 Mechanical and physical hazards (see A.3)	11
4.2.1 Entrapment of fingers and toes, ischemia.....	11
4.2.2 Small part aspiration or ingestion, internal asphyxiation (choking)	12
4.2.3 Cutting, puncture, abrasion.....	13
4.3 Chemical hazards (see A.4).....	13
4.3.1 Migration of certain substances.....	13
4.3.2 Formaldehyde	14
4.3.3 Flame retardants.....	14
4.4 Thermal hazards - hypothermia and hyperthermia (see A.5).....	15
4.4.1 General.....	15
4.4.2 Requirements	15
4.4.3 Test method	15
4.5 Fire hazards (see A.6)	15
4.6 Hygiene hazards (see A.7).....	15
4.6.1 Requirements and methods	15
5 User information	16
5.1 General.....	16
5.2 Marking.....	16
5.3 Purchase information.....	17
5.4 Instruction for use	17
5.5 Plastic packaging.....	18
Annex A (informative) Rationale.....	19
A.1 General.....	19
A.2 Design hazards	19
A.3 Mechanical and physical hazards.....	21
A.3.1 Hazards of entrapment of fingers and toes, ischemia.....	21
A.3.2 Hazards of strangulation	21

A.3.3	Hazards of internal asphyxiation (choking) by aspiration, or ingestion of small parts	21
A.3.4	Hazards of external asphyxiation (suffocation)	22
A.3.5	Hazards of cutting, puncture, abrasion	22
A.4	Chemical hazards.....	22
A.4.1	Hazards related to harmful substances.....	22
A.4.2	Hazards related to migration of certain substances.....	23
A.4.3	Hazards related to formaldehyde.....	23
A.5	Thermal hazards (Hyperthermia and hypothermia)	23
A.6	Fire hazards.....	24
A.7	Hygiene hazards.....	24
A.7.1	Washable (see 4.6.1.1)	24
A.7.2	Clean and free from infestation and foreign materials (see 4.6.1.2)	24
A.7.3	Feather filled products (see 4.6.1.3).....	24
A.7.4	Used recycled fibres (see 4.6.1.4)	25
Annex B (informative)	Supplementary information on thermal hazards.....	26
B.1	Background information.....	26
B.2	Thermal resistance measurement	26
B.3	Rationale for guidance to the purchaser and/or user.....	27
B.4	Relationship between thermal resistance and thickness or mass per unit area (surface density)	28
Annex C (informative)	Specific marking, purchase information and user instruction	30
Annex D (informative)	Guidance for the cot duvet dimensions.....	31
Annex E (informative)	Topics for further investigations	32
E.1	Thermal comfort.....	32
E.2	Cot duvet characteristics	32
Annex F (informative)	A-deviations.....	33
Bibliography	34

European foreword

This document (EN 16779-1:2018) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

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 February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

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 mandate given to CEN by the European Commission and the European Free Trade Association.

Following the publication and implementation of this document in CEN member countries, it has been agreed by CEN TC 248 that there should be an 18 month transition period from the date of availability to allow manufacturers to develop and produce garments that conform to the standard. This period is also to allow the supply chain, from manufacturer through to the consumer, to be cleared of non-conforming children's cot duvets.

EN 16779 is composed with the following parts:

- *Textile child care articles — Safety requirements and test methods for children's cot duvets — Part 1: Duvet (excluding duvet covers)* [the present document; currently at Formal Vote stage];
- *Textile child care use articles — Safety requirements and test methods for children's cot duvets — Part 2: Duvet covers (excluding duvets)* [currently in preparation].

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The European Commission Mandate M/497, followed by Product and Service safety in the Directorate-General Health and Consumers, under the title “Standardisation mandate to CEN, CENELEC and ETSI on the safety of child-care articles; Cluster 2- risks in the sleeping environment; Mattresses for cots, cot bumpers, suspended beds for children, duvets for children, sleep bags for children”, issued on 2011-10-20 and accepted by CEN/BT on 2011-12-20, requested that CEN develop standards or specifications including safety requirements and test methods, warnings and instructions to adult users in order to address the possible hazard posed by these products.

The aim of this European Standard is to minimize the main *risks posed by products in the sleep environment of babies and young children, such as:*

- internal asphyxiation (choking);
- entrapment;
- hyperthermia (overheating);
- strangulation;
- external asphyxiation (suffocation);
- flammability;
- injuries due to ingestion of small parts;
- injuries due to chemicals.

For the development of this document, attention was paid to:

- the child’s stages of development (age, height, weight, ability, etc.); cot duvets were studied in relation to children up to 3 years of age;
- the intended or foreseeable use of the cot duvet, bearing in mind a child’s behaviour; such behaviour exposes children to injury in ways that differ from those of adults, making children a particularly vulnerable group in society;
- the hazard presented by the cot duvet in the circumstances under which the cot duvet and the child come into contact with each other.

IMPORTANT — In order to comply with the essential safety requirements, this document is hazard based. As this document only deals with a particular textile child-care article, i.e. children's cot duvets, design characteristics have been specified only when necessary in order to introduce inherently safe design. These characteristics have been specified in a manner which allows compliance to be checked by interested parties, from designers to market surveillance authority officers.

1 Scope

This European Standard specifies requirements for the safety of children's cot duvets, excluding removable duvet covers, used in the child's sleeping environment (i.e. not under supervision), and designed to provide sufficient warmth when sleeping in a cot or similar product (e.g. crib/cradle) in which a child is contained. This document specifies requirements for cot duvets suitable for children up to 36 months. Cot duvets with permanent decorative outer fabrics also known as cot quilts or coverlet are also in the scope.

NOTE The informative Annex E lists topics of further investigations which might lead to necessary improvement of the safety requirements of children's cot duvets.

The requirements for removable cot duvet covers are excluded from this document and are covered in EN 16779-2.

If a part of the children's cot duvet is designed to offer additional function (e.g. play function), in addition of the following requirements, this part will be subjected to safety requirements related to relevant standards (see A.1).

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 71-3:2013,¹ *Safety of toys - Part 3: Migration of certain elements*

EN 1103, *Textiles - Fabrics for apparel - Detailed procedure to determine the burning behaviour*

EN 1162, *Feather and down - Test methods - Determination of the oxygen index number*

EN 1164, *Feather and down - Test methods - Determination of the turbidity of an aqueous extract*

EN 12935, *Feather and down - Hygiene and cleanliness requirements*

EN 16732:2015, *Slide fasteners (zips) - Specification*

EN ISO 105-E01, *Textiles - Tests for colour fastness - Part E01: Colour fastness to water (ISO 105-E01)*

EN ISO 139, *Textiles - Standard atmospheres for conditioning and testing (ISO 139)*

EN ISO 6330, *Textiles - Domestic washing and drying procedures for textile testing (ISO 6330)*

EN ISO 11092, *Textiles - Physiological effects - Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test) (ISO 11092)*

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

EN ISO 17226-1, *Leather - Chemical determination of formaldehyde content - Part 1: Method using high performance liquid chromatography (ISO 17226-1)*

¹ Impacted by EN 71-3:2013+A2:2017

ISO 105-F10, *Textiles — Tests for colour fastness — Part F10: Specification for adjacent fabric: Multifibre*

ISO 4915, *Textiles — Stitch types — Classification and terminology*

ISO 5085-1, *Textiles — Determination of thermal resistance — Part 1: Low thermal resistance*

ISO 7000, *Graphical symbols for use on equipment — Registered symbols*

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

cot duvet

bedding item intended to cover the child's body, consisting of a filling material permanently sewn into a textile cover intended to be used with or without duvet cover in the cot or in a similar product

Note 1 to entry: The terms "cot quilt" or "coverlet" are interchangeable with "cot duvet".

3.2

cot duvet cover

removable bedding item intended to envelop cot duvet(s)

3.3

cot

bed for a child consisting of a base and enclosed by high sides to prevent the child from falling out

3.4

harm

injury or damage to the health of people

[SOURCE: ISO/IEC Guide 51:2014, 3.1, modified - "or damage to property or the environment" has been deleted.]

3.5

hazard

potential source of *harm* (3.4)

[SOURCE: ISO/IEC Guide 51:2014, 3.2]

3.6

risk

combination of the probability of occurrence of *harm* (3.4) and the severity of that harm

[SOURCE: ISO/IEC Guide 51:2014, 3.9, modified — Note 1 to entry has been deleted.]