

	<b>Bezpečnosť detských odevov. Odporúčania na navrhovanie a výrobu detských odevov. Mechanická bezpečnosť.</b>	<b>TNI CEN/TR 16792</b>  80 0705
--	----------------------------------------------------------------------------------------------------------------	--------------------------------------------

Safety of children's clothing - Recommendations for the design and manufacture of children's clothing - Mechanical safety

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 16792:2014.  
This Technical standard information includes the English version of CEN/TR 16792:2014.

Táto technická normalizačná informácia bola oznámená vo Vestníku ÚNMS SR č. 04/15

**120665**

---

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2015  
Tento dokument a ani jeho časti sa nesmú rozmnožovať a rozširovať v akejkoľvek podobe  
a akýmkoľvek prostriedkami bez písomného povolenia ÚNMS SR.

TECHNICAL REPORT

**CEN/TR 16792**

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

December 2014

---

ICS 61.020; 97.190

English Version

## Safety of children's clothing - Recommendations for the design and manufacture of children's clothing - Mechanical safety

Sécurité des vêtements d'enfants - Recommandations pour  
la conception et la fabrication des vêtements d'enfants -  
Sécurité mécanique

Sicherheit von Kinderbekleidung - Teil 1: Mechanische  
Sicherheit

This Technical Report was approved by CEN on 15 December 2014. It has been drawn up by the Technical Committee CEN/TC 248.

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, 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: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>Page</b>
<b>Foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>6</b>
<b>4 Mechanical hazards and associated risks</b> .....	<b>9</b>
<b>5 Risk assessment</b> .....	<b>10</b>
<b>6 Garment design, materials and construction</b> .....	<b>11</b>
<b>7 Manufacture</b> .....	<b>18</b>
<b>8 Packaging</b> .....	<b>21</b>
<b>9 Security tagging and display of garments for retail</b> .....	<b>21</b>
<b>Annex A (informative) Accident data</b> .....	<b>22</b>
<b>Annex B (normative) Method for determination of removal force of attached components</b> .....	<b>23</b>
<b>Annex C (informative) Method for determination of the security of attachment of non-grippable attached components</b> .....	<b>33</b>
<b>Annex D (informative) Information to be supplied by the designer to the manufacturer</b> .....	<b>37</b>
<b>Annex E (informative) Rational for age definitions</b> .....	<b>38</b>
<b>Annex F (informative) Test method for tensile strength of buttons and recommended minimum strength</b> .....	<b>39</b>
<b>Annex G (normative) Slide/zip fastener specification</b> .....	<b>42</b>
<b>Annex H (normative) Small parts assessment</b> .....	<b>43</b>
<b>Bibliography</b> .....	<b>44</b>

## **Foreword**

This document (CEN/TR 16792:2014) has been prepared by Technical Committee CEN/TC 248, "Textiles and textile products", the secretariat of which is held by BSI.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

## Introduction

The General Product Safety Directive 2001/95/EC [1] require all products placed on the market to be safe, and provide information on how the safety of products should be assessed. According to the General Product Safety Directive [1] product safety may be assessed by reference to the following:

- specific product regulations;
- national regulations;
- European standards which have had their references published in the Official Journal of the European Union;
- other European standards;
- community technical specifications; national standards (i.e. national standards that are not versions of European standards);
- industry codes of good practice; European Technical Report (TR)
- state of the art and technology; and
- the safety which consumers may reasonably expect.

More details on assessment of product safety are given in the EU The General Product Safety Directive 2001/95/EC.

When designing children's clothing, it is essential to take into consideration the behaviour of children, whose need for exploration and challenge drives them to use items in new and different ways. One common factor children share is that they are unaware of cause and effect and are therefore substantially less cautious than adults in relation to hazards.

It should be emphasized that consideration of the recommendations given in this Technical Report from the earliest possible stage, i.e. the design stage, is of prime importance.

Recommendations on risk assessment are given in Clause 5. The recommendations given relate only to mechanical safety. There are many other safety aspects relating to children's clothing that need to be considered when carrying out a full risk assessment, including chemical safety, thermal protection (against heat or cold), avoidance of overheating, flammability,

## 1 Scope

This Technical Report gives recommendations for the design and manufacture of safe children's clothing in relation to mechanical hazards.

This Technical Report also gives recommendations on safety aspects of the packaging and display of children's clothing, including guidance for retailers.

This Technical Report is applicable to clothing including bonnets, hats, gloves, scarves, socks and other clothing accessories intended for all children up to 14 years of age. It is suggested that dressing up clothes meet the recommendations of this Technical Report in addition to the requirements of EN 71.

This Technical Report is intended for use at all stages of the clothing supply chain, including use by designers, specifiers and manufacturers of children's clothing. It is also intended to be used by importers, distributors and retailers to assist them in the selection of clothing that does not present a hazard.

This Technical Report is not applicable to:

- a) child care articles, such as bibs, nappies and soother holders;
- b) footwear, such as boots, shoes and slippers; or
- c) toys and other items sold with the clothing;

as these articles are not within the scope of CEN/TC 248.

This Technical Report does not include recommendations on any clothing features that might be necessary to cater for children with special needs.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 3084, *Slide fasteners (zips) - Specification*

EN 14682, *Safety of children's clothing - Cords and drawstrings on children's clothing - Specifications*

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

EN ISO 3758, *Textiles - Care labelling code using symbols (ISO 3758)*

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

EN ISO 7500-1, *Metallic materials - Verification of static uniaxial testing machines - Part 1: Tension/compression testing machines - Verification and calibration of the force-measuring system (ISO 7500-1)*

EN ISO 10012, *Measurement management systems - Requirements for measurement processes and measuring equipment (ISO 10012)*

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

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**