

PD CEN/TR 13387-4:2015



BSI Standards Publication

# Child use and care articles — General safety guidelines

Part 4: Thermal hazards

**bsi.**

...making excellence a habit.™

**National foreword**

This Published Document is the UK implementation of CEN/TR 13387-4:2015. Together with PD CEN/TR 13387-1:2015, PD CEN/TR 13387-2:2015, PD CEN/TR 13387-3:2015 and PD CEN/TR 13387-5:2015, it supersedes PD CEN/TR 13387:2004, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CW/1, Safety of child use and child care products.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2015.  
Published by BSI Standards Limited 2015

ISBN 978 0 580 87780 3

ICS 97.190

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 July 2015.

**Amendments/corrigenda issued since publication**

Date	Text affected
------	---------------

---

English Version

**Child use and care articles - General safety guidelines - Part 4:  
Thermal hazards**

This Technical Report was approved by CEN on 12 January 2015. It has been drawn up by the Technical Committee CEN/TC 252.

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>
European foreword .....		3
1	Scope .....	4
2	Terms and definitions .....	4
3	Thermal hazards .....	4
3.1	Safety philosophy .....	4
3.2	Flammability and burning hazards .....	5
3.2.1	General.....	5
3.2.2	Rationale.....	5
3.2.3	Requirements .....	5
3.3	Hazards from hot and cold surfaces.....	6
3.3.1	Rationale.....	6
3.3.2	Requirements .....	6
3.4	Hazards from hot and cold liquids or food .....	6
3.4.1	Rationale.....	6
3.4.2	Requirements .....	6
3.5	Hazards from contact with flames .....	6
3.5.1	Rationale.....	6
3.5.2	Requirements .....	6
3.6	Hyperthermia and hypothermia hazards.....	7
3.6.1	Rationale.....	7
3.6.2	Requirements .....	7
Bibliography .....		8

## **European foreword**

This document (CEN/TR 13387-4:2015) has been prepared by Technical Committee CEN/TC 252 “Child use and 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 [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TR 13387:2004.

CEN/TR 13387 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 13387-4 should be used in conjunction with CEN/TR 13387-1.

This new edition of this European technical report is a hazard based technical report. In comparison with the previous version, the main changes are:

- Flammability and burning hazards: Test methods aligned with EN 71-2:2011+A1:2014.

## **1 Scope**

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

## **2 Terms and definitions**

For the purposes of this document, the following terms and definitions apply.

- 2.1 flammability**  
ability of material to burn with a flame under specified test conditions
- 2.2 flaming debris**  
material that becomes detached from the sample during the test procedure and continues to flame as it falls
- 2.3 ignitability**  
ability to obtain sustained combustion under specified test conditions when a material is exposed to an ignition source
- 2.4 surface flash**  
rapid spread of flame over the surface of a material without ignition of its base structure at the same time
- 2.5 thermal hazard**  
hazard caused by high or low temperatures

## **3 Thermal hazards**

### **3.1 Safety philosophy**

Thermal hazards include hazards associated with flammability and the burning characteristics of materials, contact with hot and cold surfaces and liquids, contact with flames, contact with products that melt on heating and overheating or exposure of a child to very low or very high temperatures.

Chemical products such as flame retardants which may create chemical hazards should be avoided in child use and care articles. Flammability requirements should be set with a view to avoid the use of flame retardant, this may be solved either by design or use of appropriate materials.

The following materials should not be used in the manufacture of child use and care articles:

- celluloid (cellulose nitrate) and materials with a similar behaviour except when used in varnish or paint;
- materials with a pile surface which produces surface flash on contact with a flame.

In addition child use and care articles should not contain flammable gases, flammable liquids. For EU countries the categories are defined in EU Directives.