

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

Contents

Page

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.