
Tekstilije in tekstilni izdelki - Napotki o zdravstvenih in okoljskih vprašanjih, povezanih s kemijsko vsebnostjo tekstilnih izdelkov, namenjenih za oblačila, notranje tekstilije in oblazinjenje

Textiles and textile products - Guidance on health and environmental issues related to chemical content of textile products intended for clothing, interior textiles and upholstery

Textilien und textile Erzeugnisse - Anleitung für Gesundheits- und Umweltfragen in Bezug auf den Chemikaliengehalt von Textilerzeugnissen für Bekleidung, Heimtextilien und Polstermöbel

Textiles et produits textiles - Guide sur les conséquences environnementales et sur la santé liées aux substances chimiques présentes dans les produits textiles destinés à l'habillement, aux textiles d'intérieur et à l'ameublement

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English Version

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This Technical Report was approved by CEN on 14 May 2015. It has been drawn up by the Technical Committee CEN/TC 248.

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European foreword

This document (CEN/TR 16741:2015) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

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Introduction

In 2003, the company CREM (Consultancy and Research for Environmental Management, Amsterdam, The Netherlands) started reviewing a selected number of European standards to identify relevant environmental concerns which should be addressed. Horizontal requirements were drafted during the continuing work on draft standards. These horizontal requirements comprise, among others, CMR chemicals (carcinogenic, mutagenic and toxic to reproduction), PBTs and vPvB substances (persistent, bioaccumulative and toxic and very persistent and very bioaccumulative substances) and substances identified as causing serious and irreversible effects to humans or the environment equivalent to the effects mentioned on a case-by-case basis, such as endocrine disruptors.

CEN/TC248 has decided to adopt the proposal included in the study as a technical report with general requirements for textile products with direct skin contact.

The working group extended the scope of the technical report to textile products in the proximity of the human body .

In this technical report, the wording 'textile product' is used, as defined in the Textile Fibre Regulation (EU) No 1007/2011. In the parts where REACH is described, the wording 'textile article' is used in the same meaning. Thus, in the context of this technical report 'textile product' and 'textile article' are the same.

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CEN/TR 16741:2015 (E)**1 Scope**

This Technical Report specifies environmental and health recommendations for textile products (including accessories) with direct skin contact and in the proximity of the human body.

This Technical Report facilitates the understanding of chemicals with intended uses in the manufacturing of goods in the fields of textile products intended to clothing, interior textiles and upholstery, to comply with the European chemical regulations and recommendations in force in EU.

WARNING — This Technical Report is not intended to substitute the existing regulations. The reader is requested to check the current existing regulation.

By suggesting that the textile market follows the ethos of this Technical Report, and thereby avoiding the use of unwanted substances in the manufacture of textile products, the level of protection of human health and of environment will be increased.

The distinguishing properties of the chemicals and the processes in which they are used (intended use substances) or they occur (unintended release substances) are described in this technical report.

This Technical Report mentions, when relevant, the existing standardized test methods commonly in use, as well as, the related limit values which are generally accepted. Only the standard identification number is given in the main text and the related title is listed in Bibliography.

NOTE 1 When limit values are given, possible contamination by the external environment and inaccuracy in the measurement of very low concentration may be taken into consideration.

The listed substances of this Technical Report can be categorised in two: one related to intended use, another one related to unintended release.

NOTE 2 Inclusion in the candidate list of EU REACH Regulation (EC) n°1907/2006 has been mentioned in this Technical Report for some substances. This does not necessarily mean that a substance, for which such a note is not made, would not be included in the candidate list in the future (new substances are regularly included in the list).

NOTE 3 For filling material such as “feather & down”, refer to CEN TC 222 and, for other material used in clothing such as leather, refer to CEN TC 309, for toys, refer to CEN TC 252.

2 Terms and definitions

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

2.1 textile clothing and accessories
clothing and accessories (such as handkerchiefs, scarves, bags, shopping bags, rucksacks, belts etc.) consisting of at least 80 % by weight of textile fibres

[SOURCE: EU fibre composition Regulation (EC) n°1007/2011]

2.2 interior textiles, textile products for interior use
textile products for interior use: textile products for interior use consisting of at least 80 % by weight of textile fibres; wall and floor coverings are excluded

[SOURCE: EU fibre composition Regulation (EC) n°1007/2011]

2.3 fibres, yarn and fabric
intended for use in textile clothing and accessories or interior textiles

Note 1 to entry: For 'textile clothing and accessories' and for 'interior textiles': down, feathers, membranes and coatings need not be taken into account in the calculation of the percentage of textile fibres.

2.4

CMR chemical

chemical (substance or substance mixtures) belonging to at least one of three different categories: Carcinogenic, Mutagenic and Reprotoxic (toxic to reproduction)

Note 1 to entry: CMR chemicals are classified according to EU Classification Labelling Packaging Regulation (EC) n°1272/2008 and are covered by the following R-phrases: R40, R45, R46 R49, R60, R61, R62, R63 and R68 (see Annex A).

2.5

PBT and vPvB substances

Persistent, Bio accumulative and Toxic substances and very Persistent and very Bio accumulative substances

Note 1 to entry: The terms of PBT and vPvB substances are defined in EU REACH Regulation (EC) n°1907/2006

2.6

Substances of Very High Concern (SVHC)

substances which should be treated with equivalent concern as CMR chemical and PBT and vPvB substances.

Note 1 to entry: These substances for which there is scientific evidence of probable serious effect to human health or the environment which give rise to an equivalent level of concern to CMR and/or PBT and/or vPvB substances.

3 General recommendations

3.1 CMR chemicals

The product should not contain or release any carcinogenic, mutagenic or reprotoxic chemicals (CMR chemicals) in amounts exceeding 0,1 % by weight of the whole product.

3.2 PBT and vPvB substances

The product should not contain any PBT and vPvB substances which meet the criteria in Annex XIII of EU REACH Regulation (EC) n°1907/2006, in amounts exceeding 0,1 % by weight of the whole product.

3.3 SVHC ("Substances of Very High Concern")

SVHC are defined in Article 57 of EU REACH Regulation (EC) n°1907/2006 and include substances which are:

- Carcinogenic, Mutagenic or toxic to Reproduction (CMR), meeting the criteria for classification in category 1 or 2 in accordance with Directive 67/548/EEC. This directive was recently replaced by the new EU Classification Labelling Packaging Regulation (EC) n°1272/2008 on classification, labelling and packaging of chemical substances and mixtures, the so-called CLP Regulation. According to the new CLP Regulation these substances shall be classified as 1a or 1b.
- Persistent, Bioaccumulative and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) according to the criteria in Annex XIII of EU REACH Regulation (EC) n°1907/2006,
- Identified, on a case-by-case basis, from scientific evidence as causing probable serious effects to human health or the environment of an equivalent level of concern as those above (e.g. endocrine disrupters, allergenic substances and sensitizing substances)

NOTE The list of identified substances of very high concern is updated regularly. The current listing can be found at <http://echa.europa.eu/candidate-list-table>. The obligations relating to placing on the market articles containing SVHC

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substances can be reviewed on ECHA webpages. Uses of some SVHCs in the EU require authorization. More information on this can also be found at <http://echa.europa.eu/>.

4 Specific criteria for textile products

The criteria are listed in Table 1 in relation to the type of fibres and in Table 2 in relation to the type of finishing and accessories.

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Table 1 — Criteria in relation to the type of fibres

Criteria	Type of fibres ^{a)}								
	natural fibres		man-made fibres						
	Animal fibres	Cellulose fibres	Polyester	Polyamide	Acetate; Triacetate	Acrylic	Viscose	Elastane	Elastodiene
Formaldehyde	X	X					X		
Azo dyes	X	X	X	X	X	X	X		
Extractable heavy metals									
Cd		X	X	X	X	X	X		
As		X							
Hg		X							
Ni		X							
Cu		X		X					
Pb							X		
Cr	X				X				
Co	X	X		X					
Sb			X						
Chromium (VI)	X			X					
Chlorinated Phenols									
PCP, TeCP, TriCP	X	X	X	X	X	X	X		
OPP	X	X	X	X	X	X	X		
Carcinogenic dyes	X	X	X	X	X	X	X		
Allergenic Disperse dyes			X	X	X	X			
Chlorinated benzenes and toluenes			X	X	X	X			

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Organotin compounds	X	X	X	X	X	X	X	X	
Flame retardants	X	X	X	X	X	X	X		
Acrylonitrile						X			
Pesticides	X	X							
Herbicides		X							
Dimethylformamide (DMF)						X			
Dimethylfumarate (DMFu)	X	x	X	X	X	X	X		
APEO	X	X	X	X	X	X	X		
DMA						X	X	X	
PFOS ^{b)}	X	X	X	X	X	X	X		
PAH			X	X	X	X	X	X	X
<p>^{a)} In case of fibre blends, all criteria related to the fibre of the blends have to be considered.</p> <p>^{b)} only for water-, oil- and dirt- repellent finish or coated</p>									

Table 2 — Criteria in relation to the type of finishing and components used on textile products (buttons, slide fasteners, buckles, etc.)

Criteria	Type of finishing or accessories											
	Prints	Leather ^{a)}	coated fabrics	metallic	Coated metal	galvanized ABS	painted metal	Plastic	wood	Polyurethane (foam)	rubbers	Glass
Formaldehyde	X	X	X						X	X		
Azo dyes	X	X	X							X	X	
4,4'-Diaminodiphenylmethane										X	X	
Extractable heavy metals												
Cd	X		X	X	X		X	X	X			X
As			X	X	X				X			X
Hg									X			
Ba												X
Se												X
Ni	X			X	X	X	X					X
Cu	X	X										
Pb	X	X										X
Cr	X	X										
Co	X											X
Sb	X		X									X
Chromium (VI)		X	X		X	X						X (glue)
Soluble mineral tanning agents Al, Cr, Ti, Zr		X										
Ni			X	X		X	X					
Ni wear				X	X		X					

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Total Cd	X		X	X	X	X	X	X	X		X		
Lead in paint							X						
Total lead	X	X	X	X	X		X	X			X		
Phthalates	X		X										
Phthalates (Child care articles)	X		X					X					
Chlorinated Phenols:PCP, TeCP	X	X	X						X				
OPP	X	X	X										
Allergenic Disperse dyes			X										
Chlorinated benzenes and toluenes	X		X										
Organic Tin compounds	X	X	X					X			X	X	

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Table 3 — Criteria in relation to the type of finishing and components used on textile products (buttons, slide fasteners, buckles, etc.)

Criteria	Type of finishing or accessories											
	Prints	Leather ^{a)}	coated fabrics	metallic	Coated metal	galvanized ABS	painted metal	Plastic	wood	Polyurethane (foam)	rubbers	Glass
Nitrosamines											X	
Chloroalcanes		X						X				
Dimethylformamide (DMF)			X									
Dimethylfumarate (DMFu)		X	X									
PAH's	X	X	X					X			X	

^{a)} leather mentioned only for comparison –refer to document CEN TC309

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