

Quality legal requirements - Safety Requirements - Chemicals

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Updated 04.07.05

Articles produced for C&A must meet **all** European legal restrictions regarding forbidden chemical substances.

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pH Value

PVC

Carcinogenic Dyes : The following dyestuffs are classified to be carcinogenic

Generic Name	C.I. Structure Number	CAS-Number	Test Method	Limit
C.I. Acid Red 26	C.I. 16 150	3761-53-3	TLC and LC-MS	Not detected
C.I. Basic Red 9	C.I. 42 500	569-61-9	DIN 54231 (draft) [previously known as DIN NMP 512]	
C.I. Direct Black 38	C.I. 30 235	1937-37-7		
C.I. Direct Blue 6	C.I. 22 610	2602-46-2		
C.I. Direct Red 28	C.I. 22 120	573-58-0		
C.I. Disperse Blue 1	C.I. 64 500	2475-45-8		
C.I. Disperse Yellow 3	C.I. 11 855	2832-40-8		
C.I. Basic Violet 14	C.I. 42 510	632-99-5		
C.I. Disperse orange 11	C.I. 60 700	82-28-0		

The following dyestuffs cause environmental problems

Generic Name		Index Nr.	Test Method	Limit
Navy blue 018112		611-070-00-02	Extraction TLC	Banned during production

Allergenic Disperse Dyes : The following dyestuffs are classified to be allergenic

Generic Name	C.I. Structure Number	CAS-Number	Test Method	Limit
C.I. Disperse Blue 1	C.I. 64 500	2475-45-8	TLC and LC-MS	NOT detected
C.I. Disperse Yellow 3	C.I. 11 855	2832-40-8	DIN 54231 (draft) [previously known as DIN NMP 512]	NOT detected
C.I. Disperse Blue 3	C.I. 61 505	2475-46-9		5 mg/l
C.I. Disperse Blue 7	C.I. 62 500	3179-90-6		
C.I. Disperse Blue 26	C.I. 63 305	3860-63-7		
C.I. Disperse Blue 35		12222-75-2		
C.I. Disperse Blue 102		12222-97-8		
C.I. Disperse Blue 106		12223-01-7		
C.I. Disperse Blue 124		61951-51-7		
C.I. Disperse Brown 1		23355-64-8		
C.I. Disperse Orange 1	C.I. 11 080	2581-69-3		
C.I. Disperse Orange 3	C.I. 11 005	730-40-5		
C.I. Disperse Orange 76/37		12223-33-5		
C.I. Disperse Red 1	C.I. 11 110	2872-52-8		
C.I. Disperse Red 11	C.I. 62 015	2872-48-2		
C.I. Disperse Red 17	C.I. 11 210	3179-89-3		
C.I. Disperse Yellow 1	C.I. 10 345	119-15-3		
C.I. Disperse Yellow 9	C.I. 10 375	6373-73-5		
C.I. Disperse Yellow 39		12236-29-2		
C.I. Disperse Yellow 49		54824-37-2		

Azo Dyes from which arylamines can be split off under reductive conditions

	Index Nr.	CAS-Number	Test Method	Limit
Biphenyl-4-ylamin 4-aminobiphenyl xenylamine	612-072-00-6	92-67-1	Textiles in general: EN 14362-1	30 mg/kg
Benzidine	612-042-00-2	92-87-5	Textiles from PES: EN 14362-2	
4-chloro-o-toluidine		95-69-2	Leather: ISO/TS 17234	
2-naphtylamine	612-022-00-3	91-59-8		
o-aminoazotoluene 4-amino-2',3-dimethylazobenzene 4-o-tolylazo-otoluidine	611-006-00-3	97-56-3		
5-nitro-o-toluidine		99-55-8		
4-chloroaniline		106-47-8		
4-methoxy-m-phenylenediamine		615-05-4		
4,4'-methylenedianiline 4,4'-diaminodiphenylmethane	612-051-00-1	101-77-9		
3,3'-dichlorobenzidine 3,3'-dichlorobiphenyl-4, 4'-ylenediamine	612-068-00-4	91-94-1		
3,3'-dimethoxybenzidine o-dianisidine	612-036-00-X	119-90-4		

3,3-dimethylbenzidine 4,4'-bi-o-toluidine	612-041-00-7	119-93-7
4,4'-methylenedi-o-toluidine	612-085-00-7	838-88-0
6-methoxy-m-toluidine p-cresidine		120-71-8
4,4'-metylene-bis- (2-chloro-aniline) 2,2'-dichloro-4,4'-methylenedianiline	612-078-00-9	101-14-4
4,4'-oxydianiline		101-80-4
4,4'-thiodianiline		139-65-1
o-toluidine 2-aminotoluene	612-091-00-X	95-53-4
4-methyl-m-phenylenediamine	612-099-00-3	95-80-7
2,4,5-trimethylaniline		137-17-7
o-anisidine 2-methoxyaniline	612-035-00-4	90-04-0
4-amino azobenzene	611-008-00-4	60-09-3

Cadmium and its compounds	Test Method	Limit
	EN 1122	100 mg/kg

Chlorinated Organic Carriers	Test Method	Limit
Dichlorobenzenes	Extraction with dichlormethan, GC-MS	1.0 mg/kg (total)
Trichlorobenzenes		
Tetrachlorobenzenes		
Pentachlorobenzenes		
Hexachlorobenzene		
Chlorotoluenes		
Dichlorotoluenes		
Trichlorotoluenes		
Tetrachlorotoluenes		
Pentachlorotoluene		

Chlorinated paraffins	Test Method	Limit
Short-chain 2002/45/EC	Extraction with organic solvent Determination by GC-MS	100 mg/kg

Chromium VI	Test Method	Limit
	DIN 53314 - Pre-extraction for coloured leather - Use of Dionex	3 mg/kg

Following flame retardants are forbidden :			
	CAS Number	Test Method	Limit
Tris-(2,3-dibromopropyl)-phosphate (TRIS)	126-72-7	Extraction with MeOH / LC-MS	not detected
Tris - (aziridiny) - phosphineoxide (TEPA)	5455-55-1	Extraction with KOH/Headspace/ GC-MS	not detected

Polybromobiphenyls (PBB)	59536-65-1	Extraction with MeOH / GC-MS	not detected
Bis(2,3-dibromopropyl ether) of tetrabromobisphenol (BDBPT)	21850-44-2	Extraction with GC-MS	not detected
Bis(2,3-dibromopropyl) phosphate (BBP)	5412-25-9	Extraction with GC-MS	not detected
Octabromodiphenyl Ether (OctaBDE)	32536-52-0	Extraction with GC-MS	not detected
Pentabromodiphenyl ether (PBDE)	32534-81-9	Extraction with GC-MS	not detected

Formaldehyde	Test Method	Limit	
- Textiles :	DIN EN ISO 14184-1 (1999-02) (similar to Japanese Law 112)	- Babywear - Worn next to the skin - Outerwear	20 mg/kg 75 mg/kg 300 mg/kg
- Leather :	pr DIN 53315, 06/96		150 mg/kg
- Wood :	Emission test DIN EN 717 - part 1		0,1 ppm v/v

Lead and its compounds Updated 04.07.05	Test Method	Limit
	<u>Total Content</u> : microwave digestion	100 mg/kg Applicable for : textiles, leather, plastic, electronics, packaging
	<u>Extractable Content</u> : extraction with acid perspiration according to DIN EN ISO 105-E04	90 mg/kg Applicable for : toy materials & garment accessories (e.g. zippers, buttons, rivets, decorative glass beads/jewellery, metal jewellery, lead crystal glass, etc.)

Nickel	Test Method	Limit
	EN 12472 EN 1811 prEN 12471 rubbing test	Consumer goods such as jewellery, snap fasteners, press buttons, zip fasteners, etc., which can come into contact with the human skin for a longer period must not release more than 0.5 µg nickel per cm² per week. Additional- articles should not show possitive result according to prEN 12471, rubbing test

Organotin compounds	Test Method	Limit	
Tributyltin (TBT)	Extraction with water/ethanol/hexan, DIN 38407	Baby merchandise	0,5 mg/kg
		Other merchandise	1,0 mg/kg
Dibutyltin (DBT)		Baby merchandise	1,0 mg/kg
		Other merchandise	1,0 mg/kg

Pentachlorophenol (PCP) Tetrachlorophenol (TeCP)	Test Method	Limit

	<u>Printed polyester :</u> 1 - Extraction with ASE or alkaline extraction (KOH) 2 - Sample preparation according to method Paragraph35 LMBG B 82.02-08 , dated 06/2001 3 - Determination according to method Paragraph35 LMBG B 82.02-08 , dated 06/2001 with GC-MS (or with GC-ECD). <u>Textiles and leather :</u> 1 - Extraction and sample preparation according to method Paragraph35 LMBG B 82.02-08 , dated 06/2001 2 - Determination according to method Paragraph35 LMBG B 82.02-08 , dated 06/2001 with GC-MS (or with GC-ECD).	0.5 mg/kg
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Phthalates	Test Method	Limit
	Extraction with organic solvents GC/LC-MS	For deliveries from 01.01.2005 : the sum of following PHT may not exceed the limit of 0,1% (1000 mg/kg) abbreviation name CAS - Nr. DINP Di-iso-nonylphthalat 28553-12-0 DNOP Di-n-octylphthalat 117-84-0 DEHP Di (2-ethylexyl)phthalat 117-81-7 DIDP Di-iso-decylphthalat 26761-40-0 BBP Butylbenzylphthalat 85-68-7 DBP Dibutylphthalat 84-74-2 This restriction is valid for all articles, for all ages and whether or not designed for, or indeed capable of, being placed in the mouth.

ADDITIONAL C&A REQUIREMENTS	Test Method	Limit
Surface Flash in pile materials and hairy cellulosic or cellulosic blend materials	EN 1103 before and after washing	The first marker thread may not be passed
Corrosion of metal parts	EN 344-1 part 5.5.2	Metal parts must not show corrosion
Odour	SNV 195 651	3 (= clear)
Polystyrene in plastic parts	ISO 3175-1	When dry-cleaning is required plastic parts containing polystyrene (PS) are not allowed
pH Value	ISO 3071-1980	Baby / Contact with the skin : 4.0 - 7.5 No skin contact : 4.0 - 9.0
PVC - Polyvinyl Chloride Updated 04.07.05	● C&A is committed to meeting the expectations of our customers, employees and interest groups in the fields of human ecology and the environment. ● In line with growing concerns that are regularly addressed by consumers, by NGO's and the media, it has been our strategy to work together with our suppliers to develop alternatives to PVC (Polyvinyl Chloride) in our products and in product related packaging. ● C&A has communicated its requirement to all suppliers that product delivered to C&A Stores as from 01.01.2005 should not contain PVC, with definite and total phase out being achieved by mid 2005. Under the terms of specific shoe testing requirements, the PVC restriction for shoes will be introduced short/mid term. ● For many years C&A has applied this strategy for Babywear Collections, and in line with other major European retailers, has now taken the decision to include all product in this requirement.	