

Substance	Natural Fibers	Blended Fibers	Synthetic Fibers	Artificial Leather	Natural Leather	Coatings & Prints	Natural Materials	Polymers, Plastics, & Synthetic rubber	Metal	Feathers & down	Glue
Acetophenone and 2-Phenyl-2Propanol								2 <sup>A</sup>			
Acidic and Alkaline Substances (pH)	1	1	1	1	1			2			
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) & isomers	1	1	1	1	1	1	1	1		3	1
Azo-amines	1	1	1	1	1	1	1			1	
Bisphenol-A								3 <sup>B</sup>			
Chlorinated Paraffins, SCCP (C10-C13) and MCCP (C14-C17)	3	3	3	3	1	3		2			
Chlorophenols (Tri-, Tetra-, and Pentachlorophenols)	3	3		3	3	3				3	
Chlororganic Carriers		2	2		3						
Dimethylformamide (DMFa)				2		2					2
Dimethylfumarate (DMFu)	3	3	3	3	3	3		3			
Dyes, Forbidden and Disperse		2	2	2		2					
Dyes, Navy Blue		3	3	3		3					
Flame Retardants	3 (if finish is applied)										
Formaldehyde	1	1	1	1	1	1	1				1
Heavy Metals, Chromium VI	3				1						
Heavy Metals, Nickel Release									1		
Heavy Metals, Cadmium Total				3		3		3	3		
Heavy Metals, Lead Total				3		3		3 <sup>C</sup>	3		
Heavy Metals, Additional Total (Hg & As)				3		3		3	3		
Heavy Metals, Extractable	2	2	2	2	2	2		2			
N-Nitrosamines								2			
Organotin Compounds	3	3	3	3	3	3		3			3
Ortho-phenylphenol (OPP)	2	2	2	2	2	2					
Ozone-depleting Substances	3										
Perfluorinated and Polyfluorinated Chemicals (PFCs)	2 (If water- or stain-repellant finish is applied)										
Pesticides, Agricultural	3	3			3						
Phthalates				1		1		1			1
Polycyclic Aromatic Hydrocarbons (PAHs)				1		1		1			1
Styrene Monomer								2 <sup>D</sup>			
Vinyl Chloride Monomer						2 <sup>E</sup>		2 <sup>E</sup>			
Volatile Organic Compounds (VOCs)	2	2	2	2	2	2		2			2

1	Indicates that there has been a widespread use and/or frequently detected in a material
2	Indicates that the chemical has been deliberately used and/or detected in a material occasionally
3	Indicates that there is a low theoretical chance that the chemical could be used and/or detected

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	Indicates that there is almost negligible risk of a chemical being used and/or detected
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- A. 'Red Risk-level 1' applies only to Ethylene-Vinyl Acetate (EVA) foam
- B. Polycarbonate only
- C. Total Lead in forams is 'Orange Risk-level 2'
- D. Styrene-based polymers only
- E. PVC only

CAS Number	Chemical Name/Color Index Name	Restriction /Maximum Limit on Final Product or Tested Component	Potential uses in Textile Processing for Apparel & Footwear	Test Method
<b>Acetophenone and 2-Phenyl-2-Propanol</b>				
98-86-2	Acetophenone	50 ppm each	Potential breakdown products in EVA foam when using dicumyl peroxide as a cross-linking agent.	Extraction in acetoneGC/MS, sonication for 30 minutes at 60 degrees C
617-94-7	2-Phenyl-2-Propanol			
<b>Acidic and Alkaline substances</b>				
Various	pH value	Textiles: 4.0–7.5 . Leather: 3.5–7.0	pH value is a characteristic number, ranging from pH 1 to pH 14, which indirectly shows the content of acidic or alkaline substances in a product. pH values less than 7 indicate sources of acidic substances, and values greater than 7 indicate sources of alkaline substances. To avoid irritation or chemical burns to the skin, the pH value of products must be in the range of human skin— approximately pH 5.5. AFIRM recommends the limits cited to comply with all global regulations for all products.	Textiles: EN ISO 3071:2006 (KCl Solution) Leather: EN ISO 4045:2008
<b>Alkylphenol (APs) and Alkylphenol Ethoxylates (APEOs), including all isomers</b>				
Various	Nonylphenol (NP), mixed isomers	Total 100 ppm	APEOs can be used as or found in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings. APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers. Biodegradation of APEOs into APs is the main source of APs in the environment. APEOs and formulations containing APEOs are prohibited from use throughout supply chain and manufacturing processes. We acknowledge that residual or trace concentrations of APEOs may still be found at levels exceeding 100 ppm and that more time is necessary for the supply chain to phase them out completely. This limit reflects forthcoming EU legislation and was set to provide suppliers with advanced warning and direction for continuous improvement.	Extraction: 1 g sample/20 mL THF, sonication for 60 minutes at 70°C; Analysis: EN ISO 18857-2:2011
Various	Octylphenol (OP), mixed isomers			
Various	Octylphenol ethoxylates (OPEOs)			
Various	Nonylphenol ethoxylates (NPEOs)			
<b>Azo-amines</b>				
60-09-3	4-Amino azobenzene	20 ppm each	Azo dyes and pigments are colourants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those which degrade to form the listed cleavable amines are restricted. Azo dyes that release these amines are regulated and should no longer be used for dyeing textiles.	Textiles: EN ISO 14362-1:2017 Leather: EN ISO 17234-1:2015  p-Aminoazobenzene: Textiles: EN ISO 14362-3:2017 Leather: EN ISO 17234-2:2011
97-56-3	<i>o</i> -Aminoazotoluene			
92-67-1	4-Aminodiphenyl			
99-55-8	2-Amino-4-nitrotoluene			
90-04-0	<i>o</i> -Anisidine			
92-87-5	Benzidine			
106-47-8	<i>p</i> -Chloroaniline			
95-69-2	4-Chloro- <i>o</i> -toluidine			
120-71-8	<i>p</i> -Cresidine			
615-05-4	2,4-Diaminoanisole			
101-77-9	4,4'-Diaminodiphenylmethane			
91-94-1	3,3'-Dichlorobenzidine			
119-90-4	3,3'-Dimethoxybenzidine			
119-93-7	3,3'-Dimethylbenzidine			
838-88-0	3,3'-Dimethyl-4,4'-diamino-diphenylmethane			
101-14-4	4,4'-Methylene-bis-(2-chloroaniline)			
91-59-8	2-Naphthylamine			
101-80-4	4,4'-Oxydianiline			
139-65-1	4,4'-Thiodianiline			
95-80-7	2,4-Toluediamine			
95-53-4	<i>o</i> -Toluidine			
137-17-7	2,4,5-Trimethylaniline			
95-68-1	2,4-Xylidine (China, Japan only)			

87-62-7	2,6-Xylidine (China, Japan only)						
<b>Bisphenol-a</b>							
80-05-7	Bisphenol-A (BPA)	1 ppm	Used in the production of epoxy resins, polycarbonate plastics, flame retardants and PVC. Prohibited from use in food and drink containers, and items intended to come into contact with oral cavity.	Sample preparation:Extraction: 1 g sample/20 ml methanol, sonication for 60 minutes at 70 degrees C Measurement:DIN EN ISO 18857-2:2011 (mod)			
<b>Chlorinated Paraffins</b>							
85535-84-8	Short-chain chlorinated Paraffins (SCCPs) (C10-C13)	1000 ppm each	May be used as flame retardants or as fat liquoring agents in leather production. They also can be used as plasticizers.	Combined CAD/ISO 18219:2015 method V1:06/17 Extraction: ISO 18219 and analysis by GC-NCI-MS			
85535-85-9	Medium-chain chlorinated Paraffins (MCCP) (C14-C17)						
<b>Chlorophenols</b>							
15950-66-0	2,3,4-Trichlorophenol	0.5 ppm each	Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP) and tetrachlorophenol (TeCP) are sometimes used to prevent mould and kill insects when growing cotton and when storing/transporting fabrics. PCP and TeCP can also be used as preservatives in print pastes.	1 M KOH extraction, 12–15 hours at 90 degrees C, derivatization and analysis § 64 LFGB B 82.02-08 or DIN EN ISO 17070:2015			
933-78-8	2,3,5-Trichlorophenol						
933-75-5	2,3,6-Trichlorophenol						
95-95-4	2,4,5-Trichlorophenol						
88-06-2	2,4,6-Trichlorophenol						
609-19-8	3,4,5-Trichlorophenol						
4901-51-3	2,3,4,5-Tetrachlorophenol (TeCP)						
58-90-2	2,3,4,6-Tetrachlorophenol (TeCP)						
935-95-5	2,3,5,6-Tetrachlorophenol (TeCP)						
87-86-5	Pentachlorophenol (PCP), its salts and compounds						
<b>Chlororganic Carriers</b>							
95-49-8	2-Chlorotoluene	Total: 1 ppm	Chlorobenzenes and chlorotoluenes (chlorinated aromatic hydrocarbons) can be used as carriers in the dyeing process of polyester or wool/ polyester fibres. They can also be used as solvents.	DIN 54232:2010			
108-41-8	3-Chlorotoluene						
106-43-4	4-Chlorotoluene						
32768-54-0	2,3-Dichlorotoluene						
95-73-8	2,4-Dichlorotoluene						
19398-61-9	2,5-Dichlorotoluene						
118-69-4	2,6-Dichlorotoluene						
95-75-0	3,4-Dichlorotoluene						
2077-46-5	2,3,6-Trichlorotoluene						
6639-30-1	2,4,5-Trichlorotoluene						
76057-12-0	2,3,4,5-Tetrachlorotoluene						
875-40-1	2,3,4,6-Tetrachlorotoluene						
1006-31-1	2,3,5,6-Tetrachlorotoluene						
0877-11-2	Pentachlorotoluene						
541-73-1	1,3-Dichlorobenzene						
106-46-7	1,4-Dichlorobenzene						
87-61-6	1,2,3-Trichlorobenzene						
120-82-1	1,2,4-Trichlorobenzene						
108-70-3	1,3,5-Trichlorobenzene						
634-66-2	1,2,3,4-Tetrachlorobenzene						
634-90-2	1,2,3,5-Tetrachlorobenzene						
95-94-3	1,2,4,5-Tetrachlorobenzene						
118-74-1	Hexachlorobenzene						
95-50-1	1,2-Dichlorobenzene				10 ppm		
<b>Dimethylformamide</b>							
68-12-2	Dimethylformamide (DMFa)				500 ppm	DMFa is a solvent used in plastics, rubber, and polyurethane (PU) coatings	DIN CEN ISO/TS 16189:2013
<b>Dimethylfumarate</b>							
624-49-7	Dimethylfumarate (DMFu)	0.1 ppm	DMFu is an anti-mold agent used in sachets in packaging to prevent	CEN ISO/TS 16186:2012			
<b>Disperse Dyes</b>							
2475-46-9	C.I. Disperse Blue 3						
3179-90-6	C.I. Disperse Blue 7						
3860-63-7	C.I. Disperse Blue 26						

12222-97-8	C.I. Disperse Blue 102			
12223-01-07	C.I. Disperse Blue 106			
23355-64-8	C.I. Disperse Brown 1			
2581-69-3	C.I. Disperse Orange 1			
12223-33-5	C.I. Disperse Orange 37/76/59			
51811-42-8	C.I. Disperse Orange 37/76/59			
85136-74-9	C.I. Disperse Orange 149			
2872-48-2	C.I. Disperse Red 11			
3179-89-3	C.I. Disperse Red 17			
61968-47-6	C.I. Disperse Red 151			
119-15-3	C.I. Disperse Yellow 1			
6300-37-4	C.I. Disperse Yellow 7			
6373-73-5	C.I. Disperse Yellow 9			
6250-23-3	C.I. Disperse Yellow 23			
12236-29-2	C.I. Disperse Yellow 39			
54824-37-2	C.I. Disperse Yellow 49			
54077-16-6	C.I. Disperse Yellow 56	50 ppm each		
569-64-2	C.I. Basic Green 4			
2437-29-8	C.I. Basic Green 5			
10309-95-2	C.I. Basic Green 6			
548-62-9	C.I. Basic Violet 3			
2580-56-5	C.I. Basic Blue 26			
16071-86-6	C.I. Direct Brown 95			
60-11-7	4-Dimethylaminoazobenzene (Solvent Yellow 2)			
6786-83-0	C.I. Solvent Blue 4			
561-41-1	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol			
118685-33-9	Component 1: C39H23ClCrN7O12S.2Na			
Not allocated	Component 2: C46H30CrN10O20S2.3Na			
2475-45-8	Disperse Blue 1			
12222-75-2	Disperse Blue 35			
12223-01-7	Disperse Blue 106			
61951-51-7	Disperse Blue 124			
730-40-5	Disperse Orange 3			
13301-61-6	Disperse Orange 37/59/76			
2872-52-8	Disperse Red 1			
2832-40-8	Disperse Yellow 3			
<b>Carcinogenic Dyes*</b>				
3761-53-3	Acid Red 26			
569-61-9	Basic Red 9			
632-99-5	Basic Violet 14			
2602-46-2	Direct Blue 6			
1937-37-7	Direct Black 38			
573-58-0	Direct Red 28			
2475-45-8	Disperse Blue 1			
82-28-0	Disperse Orange 11			
2832-40-8	Disperse Yellow 3	Prohibited		DIN 54231 / §64 LFGB 82.02-10
<b>Flame Retardants</b>				
32534-81-9	Penta-bromodiphenyl ether (pentaBDE)			
32536-52-0	Octa-bromodiphenyl ether (octaBDE)			
1163-19-5	Decabromodiphenyl ether (DecaBDE)			
Various	All other Polybrominated diphenyl ethers (PBDEs)			
79-94-7	Tetrabromobisphenol A (TBBP A)			

Disperse dyes are a class of water-insoluble dyes that penetrate the fibre system of synthetic or manufactured fibres and are held in place by physical forces without forming chemical bonds. Disperse dyes are used in synthetic fibre (e.g., polyester, acetate, polyamide). Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles.

Navy blue colourants are regulated and are prohibited from use for dyeing of textiles.(Index 611-070-00-2)

DIN 54231:2005

59536-65-1	Polybrominated biphenyls (PBBs)			
3194-55-6	Hexabromocyclododecane (HBCDD)			
3296-90-0	2,2-bis(bromomethyl)-1,3-propanediol (BBMP)			
13674-87-8	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)			
25155-23-1	Trixylyl phosphate (TXP)			
126-72-7	Tris (2,3-dibromopropyl) phosphate (TRIS)			
545-55-1	Tris (1-aziridinyl)-phosphine oxide (TEPA)			EN ISO 17881-1:2016
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)			
5412-25-9	Bis (2,3-dibromopropyl) phosphate	10 ppm each	Flame-retardant chemicals, including the entire class or Organohalogen flame retardants, should no longer be used.	EN ISO 17881-2:2016
<b>Fluorinated Greenhouse Gases</b>				
Various	See regulation (EC) No 842/2006 for a complete list	0.1 ppm each		Sample preparation: Purge and trap — thermal desorption or SPME Measurement: GC/MS
<b>Formaldehyde</b>				
50-00-0	Formaldehyde	Adults and Children: 75 ppm Babies: 16 ppm	Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins. Although very rare in Apparel and Footwear, composite wood materials (such as particle board and plywood) must comply with existing California and forthcoming U.S. formaldehyde emission requirements (40 CFR 770). Suppliers are advised to refer to brand-specific requirements for these materials.	Textiles, wood, and paper: JIS L 1041-1983 A (Japan Law 112) or EN ISO 14184-1:2011 Leather: ISO 17226-1:2008 with ISO 17226-2:2008 confirmation method in case of interferences
<b>Heavy Metals (Extractal</b>				
7440-36-0	Antimony (Sb)	Extractable: 30 ppm	Found in or used as a catalyst in polymerization of polyester, flame	Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017
7440-38-2	Arsenic (As)	Extractable: 0.2 ppm Total: 100 ppm	Arsenic and its compounds can be used in preservatives, pesticides and defoliants for cotton, synthetic fibres, paints, inks, trims and plastics.	Extractable: Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017 Total: Textiles: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2017
7440-39-3	Barium (Ba)	Extractable: 1000 ppm	Barium and its compounds can be used in pigments for inks, plastics, surface coatings, as well as in dyeing, mordants, filler in plastics, textile finishes, and leather tanning.	Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017
7440-43-9	Cadmium (Cd)	Extractable: 0.1 ppm Total: 40 ppm	Cadmium compounds are used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides and paints.	Extractable: Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017 Total: Textiles, plastics, and metal: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2017
7440-47-3	Chromium (Cr)	Extractable for textiles: 2ppm Leather footwear for babies: 60 ppm	Chromium compounds can be used as dyeing additives, dye-fixing agents, colour fastness after- treatments, dyes for wool, silk and polyamide (especially dark shades) and leather tanning.	Textiles: DIN EN 16711-2:2016 Leather: EN ISO 17072-1:2017
18540-29-9	Chromium VI	Not detected. Requirement: <3ppm.	Though typically associated with leather tanning, Chromium VI also may be used in the dyeing of wool (after the chroming process).	Textiles: DIN 16711-2:2016 with EN ISO 17075-1:2017 if Cr is detected Leather: EN ISO 17075-1:2017 and EN ISO 17075-2:2017 for confirmation in case the extract causes interference. Conditions for leather ageing: 24 hours, 80°C, maximum 5% relative humidity, no ventilation Ageing test is used at brand discretion.
7440-48-4	Cobalt (Co)	Extractable: Adults: 4 ppm Children and babies: 1 ppm	Cobalt and its compounds can be found in alloys and pigments, and in textiles as an antimicrobial agent.	Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017
7440-50-8	Copper (Cu)	Extractable: Adults: 50 ppm Children and babies: 25 ppm	Copper and its compounds can be found in alloys and pigments, and in textiles as an antimicrobial agent.	Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017

7439-92-1	Lead (Pb)	Extractable: Adults and children: 1 ppm Babies: 0.2 ppm Total: 90 ppm	May be associated with plastics, paints, inks, pigments and surface coatings.	Extractable: Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017 Total: Non-metal: CPSC-CH-E1002-08.3 Metal: CPSC-CH-E1001-08.3 Lead in paint and surface coating: CPSIA Section 101.16 CFR 1303
7439-97-6	Mercury (Hg)	Extractable: 0.02 ppm Total: 0.5 ppm	Mercury compounds can be present in pesticides and as contaminants in caustic soda (NaOH). They may also be used in plants.	Extractable: Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017 Total: Textiles, plastics, metal: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2017
7440-02-0	Nickel (Ni)	Extractable: 1ppm Release (metal parts): Prolonged skin 0.5 ug/cm <sup>2</sup> /week Pierced part: 0.2 ug/cm <sup>2</sup> /week	Nickel and its compounds can be used for plating alloys and improving corrosion-resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.	Extractable: Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017 Release: EN 12472:2005+ A1:2009 and EN 1811:2015
7782-49-2	Selenium (Se)	Extractable: 500 ppm	May be found in synthetic fibres, paints, inks, plastics and metal trims.	Textiles: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2017
<b>Monomers</b>				
100-42-5	Styrene	500 ppm	Styrene is a precursor for polymerization and may be present in various styrene-copolymers like plastic buttons.	GC/MS Headspace 120°C for 45 minutes or Extraction in Methanol GC/MS, sonication at 60°C for 60 minutes.
75-01-4	Vinyl Chloride	1 ppm	Vinyl Chloride is a precursor for polymerization and may be present in various PVC materials like prints, coatings, flip flops, and synthetic leather.	EN ISO 6401-2008
<b>N-Nitrosamines</b>				
62-75-9	N-Nitrosodimethylamine (NDMA)	0.5 ppm each	Can be formed as by-product in the production of rubber.	GB/T 24153-2009: determination using GC/MS, with LC/MS/MS verification if possible. Alternatively, LC/MS/MS may be performed on its own. prEN 19577:2017
55-18-5	N-Nitrosodiethylamine (NDEA)			
621-64-7	N-Nitrosodipropylamine (NDPA)			
924-16-3	N-Nitrosodibutylamine (NDBA)			
100-75-4	N-Nitrosopiperidine (NPIP)			
930-55-2	N-Nitrosopyrrolidine (NPYR)			
59-89-2	N-Nitrosomorpholine (NMOR)			
614-00-6	N-Nitroso-N-methylaniline (NMPHA)			
612-64-6	N-Nitroso-N-ethylaniline (NEPhA)			
<b>Organotin Compounds</b>				
Various	Dibutyltin (DBT)	1 ppm each	Class of chemicals combining tin and organics such as butyl and phenyl groups.  Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g., antibacterials), catalysts in plastic and glue production, and heat stabilizers in plastics/rubber.  In textiles and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.	CEN ISO/TS 16179: 2012
Various	Dioctyltin (DOT)			
Various	Monobutyltin (MBT)			
Various	Tricyclohexyltin (TCyHT)			
Various	Trimethyltin (TMT)			
Various	Trioctyltin (TOT)			
Various	Tripolytin (TPT)			
Various	Tributyltin (TBT)			
Various	Triphenyltin (TPHT)	0.5 ppm each		
<b>Ortho-phenylphenol</b>				
90-43-7	Ortho-phenylphenol (OPP)	1000 ppm	OPP can be used for its preservative properties in leather or as a car	1 M KOH extraction, 12 to 15 hours at 90 degrees C, derivatization and analysis § 64 LFGB B 82.02-08 or DIN EN ISO 17070:2015
<b>Ozone Depleting Substances</b>				
Various	See Regulation (EC) No 1005/2009 for a complete list.	5 ppm	Ozone-depleting substances have been used as a foaming agent in PU foams as well as a dry-cleaning agent. They are prohibited from use.	GC/MS headspace 120 degrees C for 45 minutes
<b>Perfluorinated and Polyfluorinated Chemicals (PFCs)</b>				

Various	Perfluorooctane sulfonate (PFOS) and related substances		long-chain and short-chain commercial water-, oil-, and stain-repellent agents. PFOA may also be used in polymers like polytetrafluoroethylene (PTFE). Long-chain PFC technology is restricted from use, with a 25-ppb limit on PFOA and its salts and a 1000 ppb total limit on PFOA-related substances in all materials. See Commission Regulation (EU) 2017/1000. This is effective 04 July 2020. RSL limits will be revised in a subsequent update.				
Various	Perfluorooctanoic acid (PFOA) and related substances	1 ug/m <sup>2</sup> each		CEN/TS 15968:2014			
<b>Pesticides, Agricultural</b>							
Various	See Appendix A for a complete list.	0.5 ppm each	May be found in natural fibers, primarily cotton.	Natural Fibers: ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09			
<b>Polycyclic aromatic hydrocarbons (PAH)</b>							
83-32-9	Acenaphthene	Acenaphthene--Pyrene: No individual 1 ppm each Child care articles: 0.5 ppm  Total: 10 ppm	PAHs are natural components of crude oil and are common residues from oil refining. PAHs have a characteristic smell similar to that of car tires or asphalt. Oil residues containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastics, lacquers and coatings. PAHs are often found in the outsoles of footwear and in printing pastes for screen prints. PAHs can be present as impurities in Carbon Black. They also may be formed from thermal decomposition of recycled materials during reprocess	AFPS GS 2014			
208-96-8	Acenaphthylene						
0120-12-17	Anthracene						
191-24-2	Benzo(g,h,i)perylene						
86-73-7	Fluorene						
206-44-0	Fluoranthene						
193-39-5	Indeno(1,2,3-cd)pyrene						
91-20-3	Naphthalene						
85-01-8	Phenanthrene						
129-00-0	Pyrene						
56-55-3	Benzo(a)anthracene						
50-32-8	Benzo(a)pyrene						
205-82-3	Benzo(j)fluoranthene						
192-97-2	Benzo(e)pyrene						
205-99-2	Benzo(b)fluoranthene						
207-08-9	Benzo(k)fluoranthene						
218-01-9	Chrysene						
53-70-3	Dibenzo(a,h)anthracene						
<b>Phthalates</b>							
28553-12-0	Di-isononyl phthalate (DINP)	500 ppm each Total: 1000 ppm	Esters of ortho-phthalic acid (Phthalates) are a class of organic compound commonly added to plastics to increase flexibility. They are sometimes used to facilitate the moulding of plastic by decreasing its melting temperature. Phthalates can be found in: -Flexible plastic components (e.g. PVC) -Print pastes -Adhesives -Plastic buttons -Plastic sleeveings -Polymeric coatings The listed Phthalates are those most commonly used and regulated across industry sectors. Find more information about additional Phthalates on the REACH substances of very high concern (SVHC) candidate list, which is updated frequently.	Sample preparation: CPSC-CH-C1001-09.3 Measurement: Textile: GC-MS, EN ISO 14389:2014 Leather: GC-MS			
117-84-0	Di-n-octyl phthalate (DNOP)						
117-81-7	Di (2-ethylhexyl) phthalate (DEHP)						
26761-40-0	Di-isodecyl phthalate (DIDP)						
85-68-7	Benzyl Butyl phthalate (BBP)						
84-74-2	Di-n-butyl phthalate (DBP)						
84-69-5	Diisobutylphthalate (DIBP)						
84-75-3	Di-n-hexyl phthalate (DnHP/DHP)						
84-66-2	Diethyl phthalate (DEP)						
131-11-3	Dimethyl phthalate (DMP)						
131-18-0	Dipentyl phthalate (DPENP)						
84-61-7	Dicyclohexyl phthalate (DCHP)						
<b>Volatile Organic Compounds</b>							
71-43-2	Benzene				5 ppm		
75-15-0	Carbon Disulfide						
56-23-5	Carbon Tetrachloride						
67-66-3	Chloroform						
108-94-1	Cyclohexanone						
0107-06-02	1,2-Dichloroethane						
75-35-4	1,1-Dichloroethylene						
127-19-5	Dimethylacetamide (DMAC)						
100-41-4	Ethylbenzene						



76-01-7	Pentachloroethane	Total 1000 ppm	These VOCs should not be used in textile auxiliary chemical preparations. They are also associated with solvent-based processes such as solvent-based polyurethane coatings and glues/ adhesives. They should not be used for any kind of facility cleaning or spot cleaning.	For general VOC screening: GC/MS headspace 45 minutes at 120°C For DMAC: DIN CEN ISO/TS 16189:2013
630-20-6	1,1,1,2-Tetrachloroethane			
79-34-5	1,1,2,2-Tetrachloroethane			
127-18-4	Tetrachloroethylene (PERC)			
108-88-3	Toluene			
71-55-6	1,1,1-Trichloroethane			
79-00-5	1,1,2-Trichloroethane			
79-01-6	Trichloroethylene			
1330-20-7	Xylenes (meta-, ortho-, para-)			
108-38-3				
95-47-6				
106-42-3				