

K E R I N G



Product Restricted Substances List (PRSL)
and Product Safety Requirements

Product Compliance Advisory Department

Rev. 07 - May 2022

SCOPE

Compliance with the standards contained in the present document is mandatory for all Kering products, including packaging materials.

INTRODUCTION

Kering Group committed to operating in a compliant manner in order to protect its customers, workers, Brands and the environment. The “Kering Product Restricted Substances List and Product Safety Requirements” is a necessary part of this commitment. Moreover, the present document is intended to help users to understand and comply with the strictest worldwide legislation about health, product safety and the environment.

A primary aim of Kering is to ensure that only safe and compliant products are offered to the customer.

Kering restrictions are generally based on existing compulsory global regulations, but in certain cases it has been decided to impose stricter limitations on raw materials and finished products in case of the evidence that they may present safety risks for final customers and the environment, although specific act has not yet been released.

NOTE

1. This document does not cover specific safety requirements for items other than those of the "fashion system" (Ready to Wear, Soft Accessories, Footwear, Leather goods, Jewellery, Eyewear and their Packaging); for example toys, baby care products, food contact products, electrical and electronic products, cosmetic products, etc. are excluded.
2. EC Regulation no. 1907/2006 (REACH):
 - All materials must be provided according to EC Regulation and all its amendments in force at the time of delivery of the items (<http://echa.europa.eu/it/home>).
 - All materials shall not contain SVHC reported on "Candidate List" (<http://echa.europa.eu/it/candidate-list-table>) at the time of delivery of the items. Otherwise, the supplier must inform us immediately.
3. Children's Products must meet, in addition to any other requirement reported in this document, also non-federal regulations in the US: suppliers must comply with the non-intentional use of several hazardous chemicals. If the use cannot be avoided, suppliers must inform us immediately. The list of these chemicals is reported in Section 1.10.
4. All test methods referred to regulations must be performed in accordance to the release in force at the time of delivery of the items.
5. PVC (polyvinyl chloride) is banned in all materials and finished products, in accordance with Kering Standards.
6. PFAS (Perfluoroalkyl substances – PFC) are banned in all chemical products used to process/manufacture Kering raw materials and finished products in accordance with Kering MRSL V.2.0
7. For additional information about Kering Standards please refer to: https://keringcorporate.dam.kering.com/m/1ca1b08d57d7292d/original/kering_standards_en.pdf.

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MAIN UPDATE

The “Kering Product Restricted Substances List and Product Safety Requirements” will be updated by Product Compliance Advisory Department annually or whenever required, as worldwide Legislations and Regulations are constantly evolving, reserving the right to alter the update at any time outside of the schedule.

Revision ref.	News added or updated	Material/Product involved
Rev. 07	Bisphenols	Leather and fur

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1. KERING PRODUCT RESTRICTED SUBSTANCES LIST (PRSL)

1.1 Textile

Parameter		Unit	Requirements		Test method reference
			Babies (≤ 36 months)	Children (3-14 years) & Adults (>14 years)	
Acid boric		mg/kg	≤ 1000		Screening Test: acid digestion ICP-MS; Specific Test: Aqueous extraction - TEA derivatization - GC-MS
Asbestos (Appendix 2)		mg/kg	Not detected		Microscopic examination
Biocides (Appendix 3)		mg/kg	≤ 0,5 (sum) (PCP and TeCP excluded)	≤ 1 (sum) (PCP and TeCP excluded)	Chromatographic Test Methods refer to US EPA 8081
Chlorobenzenes and Chlorotoluenes (Appendix 5)		mg/kg	≤ 1 (sum)	≤ 1 (sum)	EN 17137
Chloroparaffines: Short chained (SCCPs : C ₁₀ -C ₁₃)		mg/kg	≤ 50 (sum)		ISO 22818
Chloroparaffines: Medium chained (MCCPs : C ₁₄ -C ₁₇)		mg/kg	≤ 1000 (sum)		
Colour Fastness to	Dry rubbing	gray scale	≥ 4	≥ 3	EN ISO 105-X12; GB 18401: GB/T 3920
	Perspiration (acid and alkaline)	gray scale	≥ 3/4	≥ 3	EN ISO 105-E04; GB 18401: GB/T 3922
	Saliva	gray scale	≥ 4	N.A.	GB 18401: GB/T 18886
	Water	gray scale	≥ 3/4	≥ 3	EN ISO 105-E01; GB 18401: GB/T 5713
	Wet rubbing	gray scale	≥ 3 ≥ 2/3 (only dark colour)	≥ 2/3 (≤ 14 years)	EN ISO 105-X12; GB 31701: GB/T 3920
Dimethyl fumarate		mg/kg	≤ 0,1		ISO/TS 16186 - GB/T 26713
Dyes	Allergenic Disperse (Appendix 1)	mg/kg	Not detectable (≤ 5 mg/kg)	Not detectable (≤ 5 mg/kg) ≤ 50 (recycled materials only)	DIN 54231 ISO 16373-2
	Azo: aryl amines can be split off under reductive conditions (Appendix 9)	mg/kg	≤ 20 (each)		UNI EN 14362-1,3 GB/T 17592.1 GB/T 23344
	Carcinogenic (Appendix 4)	mg/kg	Not detectable (≤ 5 mg/kg)	Not detectable (≤ 5 mg/kg) ≤ 50 (recycled materials only)	DIN 54231 - Analysis TLC and LC-MS ISO 16373-3
	Navy Blue (Appendix 12)	mg/kg	Not detectable (≤ 5 mg/kg)		Based on DIN 54231



Parameter		Unit	Requirements		Test method reference
			Babies (≤ 36 months)	Children (3-14 years) & Adults (>14 years)	
Flame Retardants (Appendix 8)		mg/kg	Not detectable (≤ 5 mg/kg)		GB/T 24279 - ISO 17881-1-2 Extraction with organic solvent - Analysis by GC-MS; GC-ECD; LC-MS; KS 62321
Formaldehyde (free and extractable)		mg/kg	≤ 16	≤ 75	EN ISO 14184-1 GB 18401: GB/T 2912.1 KS K 0611
Heavy Metals (total amount)	Cadmium	mg/kg	≤ 40	≤ 40 (≤ 14 years) ≤ 50	EN 16711-1
	Lead	mg/kg	≤ 40 (jewelry only) ≤ 90	≤ 40 (jewelry only, ≤ 14 years) ≤ 90 (≤ 14 years) ≤ 100	EN 16711-1
Mercury compounds (Appendix 11)		mg/kg	≤ 1 (mercury)		Screening Test method: ISO 17072-2 EN 16711-1
Nonylphenoethoxylates (NPEO) Octylphenoethoxylates (OPEO) (Appendix 14)		mg/kg	≤ 100 (sum)	≤ 100 (sum) ≤ 250 (non-washable recycled materials only)	ISO 18254 -1
Nonylphenols (NP) Octylphenols (OP) (Appendix 15)		mg/kg	≤ 10 (sum)		Extraction with organic solvent - Analysis by GC-MS referred to ISO 18857-1
Odorous			None		GB 18401 part 6.7
Organotin compounds (Appendix 16)		mg/kg	≤ 0,5 (TBT, TBTO, TPhT) ≤ 1 (others)	≤ 1 (TBT, TBTO, TPhT) ≤ 2 (others) ≤ 2 (recycled materials only)	ISO/TS 16179 KS K 0737 NIEA T504.30B3
Ortho-phenilphenol (OPP)		mg/kg	≤ 50	≤ 100	Extraction with organic solvent - GC-MS
Pentachlorophenol (PCP) Tetrachlorophenols (TeCP) Trichlorophenols (TCP) (Appendix 6)		mg/kg	≤ 0,05 (sum)	≤ 0,5 (sum)	UNI 11057 US EPA 8081 A
PFAS: Perfluorooctanesulfonates (PFOS) & Perfluorooctanoic Acid (PFOA) - (Appendix 17)		µg/m²	≤ 1		CEN/TS 15968
PFAS: Perfluorooctanoic Acid (PFOA) and its salts (Appendix 17)		µg/kg	≤ 25		Extraction with organic solvent - Analysis by LC-MSMS referred to CEN/TS 15968
PFAS: PFOA-related substances (Appendix 17)			≤ 1000 (sum)		



Parameter	Unit	Requirements		Test method reference
		Babies (≤ 36 months)	Children (3-14 years) & Adults (>14 years)	
PFAS: Long chain perfluoralkyl acids (C9-C14) (Appendix 17)	µg/kg	≤ 25		Extraction with organic solvent - Analysis by LC-MSMS referred to CEN/TS 15968
PFAS: Long chain perfluoralkyl related substances (C9-C14) (Appendix 17)		≤ 260 (sum)		
pH value of aqueous extract	pH	4,0÷7,5		EN ISO 3071 GB 18401: GB/T 7573
Polychlorobiphenyls (PCB) (Appendix 19)	mg/kg	≤ 0,1		Ref. EPA 3540C + EPA 8082A
Polychloronaphthalenes (PCN) (Appendix 20)	mg/kg	≤ 1		Ref. EPA 3550C + EPA 8270E
Polycyclic Aromatic Hydrocarbons (IPA - PAH) (Appendix 21)	mg/kg	≤ 0,5 (synthetic fibers only)	≤ 1 (synthetic fibers only)	AfPS GS 2019:01 ISO/TS 16190
Quinoline (CAS 91-22-5)	mg/kg	≤ 50		GC-MS extraction MeOH or THF and HPLC-MS
Siloxsanes (Appendix 22)	mg/kg	≤ 1000		Solvent extraction, GC-MS analysis

Parameter Heavy Metals (extractable)	Unit	Requirements		Test method reference
		Babies (≤ 36 months)	Children (3-14 years) and Adults (>14 years)	
Antimony	mg/kg	≤ 30		Extractable Content: extraction with acid perspiration according to: EN 16711-2 Cr (VI): GB/T 17593-3; ISO 17075
Arsenic	mg/kg	≤ 0,2	≤ 1	
Cadmium	mg/kg	≤ 0,1		
Chromium (total)	mg/kg	≤ 1	≤ 2	
Chromium VI	mg/kg	≤ 0,5		
Cobalt	mg/kg	≤ 1	≤ 4	
Copper	mg/kg	≤ 25	≤ 50	
Lead	mg/kg	≤ 0,2	≤ 1	
Mercury	mg/kg	≤ 0,02 (natural fibers only)		
Nickel	mg/kg	≤ 1	≤ 4	



Parameter (referring to coating material)		Unit	Requirements		Test method reference
			Children (≤ 14 years)	Adults (>14 years)	
Bisphenol A (BPA)		mg/kg	≤ 1		Solvent extraction, LC-MS / GC-MS analysis
Heavy Metals (total amount)	Cadmium	mg/kg	≤ 40	N.A.	EN 16711-1 CPSC-CH-E1003-09.1
	Lead	mg/kg	≤ 40 (jewelry only) ≤ 90	≤ 90	Microwave digestion; ICP-MS/OES - CPSC-CH-E-1003-09.1 - GB/T 30157
	Mercury	mg/kg	≤ 10		Microwave digestion ICP-MS/OES
Phthalates (Appendix 18)	BBP, DBP, DEHP, DIBP, DINP, DPP, DMEP, DIHP, DHNUP	mg/kg	≤ 50 (each)		EN 14389 CPSC-CH-C1001-09.4 GB/T 20388 ISO 8124-6
	DIDP, DNOP	mg/kg	≤ 1000 (sum)		
	DHP-DnHP,	mg/kg	≤ 500 (≤ 3 years) < 1000	≤ 1000	
	All other esters of o-phthalic acid	mg/kg	≤ 500 (each, ≤ 3 years)	N.A.	
Solvents (Appendix 23)		mg/kg	According to dedicated appendix		GB 19340:2003 “Extraction HS - SPME or Purge &Trap and Analysis by GC-MS” ISO/TS 16189
UV-Stabilizers (Appendix 24)		mg/kg	≤ 1000		ISO/DIS 24040 Solvent extraction, LC-MS analysis

Additional Requirements for Painted and Coated Textile - Children Products (only for 0-3 years “Infants” and 3-13 years “Children”)					
Parameter Heavy Metals (extractable)	Unit		Requirements		Test method reference
Antimony	mg/kg		≤ 60		KS G ISO 8124-3:2013 ISO 8124-3:1997 Hydrochloric Acid 0,07M
Arsenic	mg/kg		≤ 25		
Barium	mg/kg		≤ 1000		
Cadmium	mg/kg		≤ 75		
Chromium (total)	mg/kg		≤ 60		
Lead	mg/kg		≤ 90		
Mercury	mg/kg		≤ 60		
Selenium	mg/kg		≤ 500		



1.2 Leather and Fur

Parameter		Unit	Requirements		Test method reference
			Children (≤ 14 years)	Adults (> 14 years)	
Acid boric		mg/kg	≤ 1000		Screening Test: acid digestion - ICP-MS Specific Test: aqueous extraction - TEA derivatization - GC-MS
Asbestos (Appendix 2)		mg/kg	Not detected		Microscopic examination
Biocides (Appendix 3)		mg/kg	≤ 0,5 (sum) (≤ 36 months) ≤ 1 (sum) (PCP and TeCP excluded)		Chromatographic Test Methods refer to US EPA 8081
Bisphenols	BPA	mg/kg	≤ 200		Solvent extraction, LC-MS / GC-MS analysis
	BPF	mg/kg	≤ 1000		
	BPS	mg/kg	≤ 3000		
Chloroparaffines: Short chained (SCCPs : C ₁₀ -C ₁₃)		mg/kg	≤ 50 (sum)		ISO 18219-1
Chloroparaffines: Medium chained (MCCPs : C ₁₄ -C ₁₇)		mg/kg	≤ 1000 (sum)		ISO 18219-2
Chromium VI		mg/kg	≤ 3		EN ISO 17075-2
Dimethyl fumarate		mg/kg	≤ 0,1		ISO/TS 16186
Dioxins and furans (Appendix 7)		mg/kg	According to dedicated appendix		Extraction with organic solvent - Analysis by GC-MS
Dyes	Allergenic Disperse (Appendix 1)	mg/kg	Not detectable (≤ 5 mg/kg)		DIN 54231
	Azo: aryl amines can be split off under reductive conditions (Appendix 9)	mg/kg	≤ 30 (each)		EN ISO 17234-1,2 GB 20400: GB/T 19942 JIS L 1940
	Carcinogenic (Appendix 4)	mg/kg	Not detectable (≤ 5 mg/kg)		DIN 54231 - Analysis TLC and LC-MS ISO 16373-2
	Navy Blue (Appendix 12)	mg/kg	Not detectable (≤ 1 mg/kg)		Based on DIN 54231
Flame Retardants (Appendix 8)		mg/kg	Not detectable (≤ 5 mg/kg)		Extraction with organic solvent - Analysis by: GC-MS; GC-ECD; LC-MS - GB/T 24279
Formaldehyde (free and extractable)		mg/kg	≤ 20 (≤ 36 months) ≤ 75		EN ISO 17226-1 GB 20400: GB/T 19941
Heavy Metals (extractable)	Cadmium	mg/kg	≤ 0,1		EN ISO 17072-1
	Lead	mg/kg	≤ 0,8		EN ISO 17072-1
	Mercury	mg/kg	≤ 0,02		EN ISO 17072-1



Parameter		Unit	Requirements		Test method reference
			Children (≤ 14 years)	Adults (> 14 years)	
Heavy Metals (total amount)	Cadmium	mg/kg	≤ 40	≤ 1000	EN ISO 17072-2
	Lead	mg/kg	≤ 40 (jewelry only) ≤ 100 ≤ 90 (patent leather)	≤ 100 ≤ 90 (patent leather)	EN ISO 17072-2
Mercury compounds (Appendix 11)		mg/kg	≤ 1 (mercury)		Screening Test method: ISO 17072-2
Nonylphenoethoxylates (NPEO) Octylphenoethoxylates (OPEO) (Appendix 14)		mg/kg	≤ 100 (sum)		Extraction with organic solvent - Analysis by LC-MS ISO 18218-1
Nonylphenols (NP) Octylphenols (OP) (Appendix 15)		mg/kg	≤ 100 (sum)		Extraction with organic solvent - Analysis by GC-MS refer to ISO 18857-1
Organotin compounds (Appendix 16)		mg/kg	≤ 0,5 (TBT, TBTO, TPhT) ≤ 1 (others)	≤ 1 (TBT, TBTO, TPhT) ≤ 2 (others)	ISO/TS 16179
Ortho-phenylphenol		mg/kg	≤ 750		ISO 13365
Pentachlorophenol (PCP) Tetrachlorophenols (TeCP) Trichlorophenols (TCP) (Appendix 6)		mg/kg	≤ 0,5 (sum)		EN ISO 17070
PFAS: Perfluorooctanesulfonates (PFOS) & Perfluorooctanoic Acid (PFOA) - (Appendix 17)		µg/m²	≤ 1		ISO 23702-1
PFAS: Perfluorooctanoic Acid (PFOA) and its salts (Appendix 17)		µg/kg	≤ 25		
PFAS: PFOA-related substances (Appendix 17)			≤ 1000		
PFAS: Long chain perfluoralkyl acids (C9-C14) (Appendix 17)			≤ 25		
PFAS: Long chain perfluoralkyl related substances (C9-C14) (Appendix 17)			≤ 260 (sum)		
pH		pH	3,2 ÷ 7,5		EN ISO 4045
Phthalates (Appendix 18)	BBP, DBP, DEHP, DIBP, DINP, DPP, DMEP, DIHP, DHNUP	mg/kg	≤ 50 (each)		CPSC-CH-C1001-09.4 Ref. ISO 16181
	DIDP, DNOP	mg/kg	≤ 1000 (sum)		



Parameter		Unit	Requirements		Test method reference
			Children (≤ 14 years)	Adults (> 14 years)	
Phthalates (Appendix 18)	DHP-DnHP,	mg/kg	≤ 500 (≤ 3 years) < 1000	≤ 1000	CPSC-CH-C1001-09.4 Ref. ISO 16181
	All other esters of o-phthalic acid	mg/kg	≤ 500 (each, ≤ 3 years)	N.A.	
Polychlorobiphenyls (PCB) (Appendix 19)		mg/kg	$\leq 0,1$		Ref. EPA 3540C + EPA 8082A
Polychloronaphthalenes (PCN) (Appendix 20)		mg/kg	≤ 1		Ref. EPA 3550C + EPA 8270E
Siloxanes (Appendix 22)		mg/kg	≤ 1000		Solvent extraction, GC-MS analysis
Solvents (Appendix 23)		mg/kg	According to dedicated appendix		GB 19340:2003 "Extraction HS - SPME or Purge & Trap and Analysis by GC-MS" ISO/TS 16189
UV-Stabilizers (Appendix 24)		mg/kg	≤ 1000		ISO/DIS 24040 Solvent extraction, LC-MS analysis

Additional Requirements for Painted and Coated Leather and Fur - Children Products (only for 0-3 years “Infants” and 3-13 years “Children”)				
Parameter Heavy Metals (extractable)	Unit		Requirements	Test method reference
Antimony	mg/kg		≤ 60	EN 71-3 KS G ISO 8124-3:2013 ISO 8124-3:1997 Hydrochloric Acid 0,07M
Arsenic	mg/kg		≤ 25	
Barium	mg/kg		≤ 1000	
Cadmium	mg/kg		≤ 75	
Chromium (total amount)	mg/kg		≤ 60	
Lead	mg/kg		≤ 90	
Mercury	mg/kg		≤ 60	
Selenium	mg/kg		≤ 500	



Additional Requirements for Watches Straps and Similar						
Parameter		CAS Nr.	Unit	Requirements		Test method reference
Biocides	2-Octylisothiazol-3(2H)-on	26530-20-1	mg/kg	≤ 250	≤ 1200 (sum)	ISO 4044 (grinded) ISO 13365 or Solvent extraction GC-MS
	2-Phenylphenol/ortho-Phenylphenol	90-43-7	mg/kg	≤ 500		
	2-(Thiocyanomethylthio)benzothiazol	21564-17-0	mg/kg	≤ 500		
	4-Chloro-3-methylphenol	59-50-7	mg/kg	≤ 600		
Heavy Metals (total mount)	Arsenic	7440-38-2	mg/kg	≤ 1		ISO 4044 (cut or grinded) ISO 17072-2
	Cadmium	7440-43-9	mg/kg	≤ 100		
	Lead	7439-92-1	mg/kg	≤ 90		
	Tin	744031-5	mg/kg	≤ 1		



1.3 Plastic

Parameter		Unit	Requirements		Test method reference
			Children (≤ 14 years)	Adults (> 14 years)	
Asbestos (Appendix 2)		mg/kg	Not detected		Microscopic examination
Bisphenol A	Migration	mg/L	≤ 0,04		EN 71-10/11 (migration)
	Total amount	mg/kg	≤ 1		Solvent extraction, LC-MS / GC-MS analysis
Chloroparaffines: Short chained (SCCPs : C ₁₀ -C ₁₃)		mg/kg	≤ 50 (sum)		Ref. ISO 18219-1
Chloroparaffines: Medium chained (MCCPs : C ₁₄ -C ₁₇)		mg/kg	≤ 1000 (sum)		Ref. ISO 18219-2
Dioxin and Furans (Appendix 7)		mg/kg	According to dedicated appendix		Extraction with organic solvent - GC-MS
Flame Retardants (Appendix 8)		mg/kg	Not detectable (≤ 5 mg/kg)		Extraction with organic solvent - Analysis by GC-MS; GC-ECD; LC-MS
Heavy Metals (total amount)	Cadmium	mg/kg	≤ 40	≤ 100	EN 1122 (Microwave digestion - ICP)
	Lead	mg/kg	≤ 40 (jewelry only) ≤ 90 ≤ 90 (coating materials)	≤ 100 ≤ 90 (coating materials)	Microwave digestion; ICP-MS/OES - ref: CPSC-CH-E-1002-08.3 CPSC-CH-E-1003-09.1 (painted access.)
	Mercury	mg/kg	≤ 10 (coating materials)		Microwave digestion ICP-MS/OES
Organotin compounds (Appendix 16)		mg/kg	≤ 0,5 (TBT, TBTO, TPhT) ≤ 1 (others)	≤ 1 (TBT, TBTO, TPhT) ≤ 2 (others)	ISO/TS 16179
Phthalates (Appendix 18)	BBP, DBP, DEHP, DIBP, DINP, DPP, DMEP, DIHP, DHNUP	mg/kg	≤ 50 (each)		CPSC-CH-C1001-09.4; ISO 8124-6
	DIDP, DNOP	mg/kg	≤ 1000 (sum)		
	DHP-DnHP,	mg/kg	≤ 500 (≤ 3 years)	≤ 1000	
	All other esters of o-phthalic acid	mg/kg	≤ 500 (each, ≤ 3 years) < 1000	NA	
Polychlorobiphenyls (PCB) (Appendix 19)		mg/kg	≤ 0,1		Ref. EPA 3540C + EPA 8082A
Polychloronaphthalenes (PCN) (Appendix 20)		mg/kg	≤ 1		Ref. EPA 3550C + EPA 8270E
Polycyclic Aromatic Hydrocarbons (IPA - PAH) (Appendix 21)		mg/kg	≤ 0,5	≤ 1	AfPS GS 2019:01 PAK



Parameter	Unit	Requirements		Test method reference
		Children (≤ 14 years)	Adults (> 14 years)	
Siloxanes (Appendix 22)	mg/kg	≤ 1000		Solvent extraction, GC-MS analysis
Solvents (Appendix 23)	mg/kg	According to dedicated appendix		GB 19340:2003 "Extraction HS - SPME or Purge & Trap and Analysis by GC-MS" ISO/TS 16189
UV-Stabilizers (Appendix 24)	mg/kg	≤ 1000		ISO/DIS 24040 Solvent extraction, LC-MS analysis

Parameter Heavy Metals (extractable)	Unit	Requirements: Children (≤ 14 years)	Test method reference
Heavy Metals (Appendix 10)	mg/kg	According to Category III	Extractable Heavy Metals: Hydrochloric Acid 0,07M (EN 71-3)

Additional Requirements for Painted and Coated Plastic - Children Products (only for 0-3 years “Infants” and 3-13 years “Children”)				
Parameter Heavy Metals (extractable)	Unit		Requirements	Test method reference
Antimony	mg/kg		≤ 60	KS G ISO 8124-3:2013 ISO 8124-3:1997 Hydrochloric Acid 0,07M
Arsenic	mg/kg		≤ 25	
Barium	mg/kg		≤ 1000	
Cadmium	mg/kg		≤ 75	
Chromium (total amount)	mg/kg		≤ 60	
Lead	mg/kg		≤ 90	
Mercury	mg/kg		≤ 60	
Selenium	mg/kg		≤ 500	



1.4 Metal

Parameter	Unit	Requirements		Test method reference
		Children (≤ 14 years)	Adults (> 14 years)	
Arsenic (total amount)	mg/kg	≤ 1000		Microwave digestion ICP-MS/OES GB/T 21198-6 - GB/T 28021
Bisphenol A (BPA)	mg/kg	≤ 1 (coating materials)		Solvent extraction, LC-MS / GC-MS analysis
Cadmium (total amount)	mg/kg	≤ 40	≤ 100	Microwave digestion ICP-MS/OES ref: GB/T 28021
Chromium VI	mg/kg	≤ 1000		GB/T 28019
Lead (total amount)	mg/kg	≤ 40 (jewelry only) ≤ 90 ≤ 90 (coating materials)	≤ 100 ≤ 90 (coating materials)	Microwave digestion ICP-MS/OES ref: CPSC-CH-E-1001-08.3 CPSC-CH-E-1003-09.1 (painted acc.) GB/T 28021
Mercury (total amount)	mg/kg	≤ 1000 ≤ 10 (coating materials)		Microwave digestion ICP-MS/OES GB/T 21198-6 - GB/T 28021
Nickel (released from metal accessories in direct and prolonged contact with skin)	$\mu\text{g}/\text{cm}^2 \times \text{week}$	$\leq 0,50$ $\leq 0,20$ (only for pierced parts of human body)		EN 1811 (no coated, no painted and no plated accessories) EN 12472 + EN 1811 (coated, painted and plated accessories) EN 16128 (spectacle frames and sunglasses)
Polychlorobiphenyls (PCB) (Appendix 19)	mg/kg	$\leq 0,1$ (coating materials)		Ref. EPA 3540C + EPA 8082A
Polychloronaphthalenes (PCN) (Appendix 20)	mg/kg	≤ 1 (coating materials)		Ref. EPA 3550C + EPA 8270E

Parameter Heavy Metals (extractable)	Unit	Requirements: Children (≤ 14 years)	Test method reference
Heavy Metals (Appendix 10)	mg/kg	According to Category III	Extractable Heavy Metals: Hydrochloric Acid 0,07M (EN 71-3)



Additional Requirements for Painted and Coated Metal - Children Products (only for 0-3 years “Infants” and 3-13 years “Children”)				
Parameter Heavy Metals (extractable)	Unit		Requirements	Test method reference
Antimony	mg/kg		≤ 60	KS G ISO 8124-3:2013 ISO 8124-3:1997 Hydrochloric Acid 0,07M
Arsenic	mg/kg		≤ 25	
Barium	mg/kg		≤ 1000	
Cadmium	mg/kg		≤ 75	
Chromium (total amount)	mg/kg		≤ 60	
Lead	mg/kg		≤ 90	
Mercury	mg/kg		≤ 60	
Selenium	mg/kg		≤ 500	

1.5 Glass and Crystal

Parameter Heavy Metals (total amount)	Unit	Requirements		Test method reference
		Children (≤ 14 years)	Adults (> 14 years)	
Bisphenol A (BPA)	mg/kg	≤ 1 (coating materials)		Solvent extraction, LC-MS / GC-MS analysis
Cadmium (total amount)	mg/kg	≤ 40	≤ 1000	Microwave digestion ICP-MS/OES ref: CPSC-CH-E-1002-08.3
Lead (total amount)	mg/kg	≤ 40 (jewelry only) ≤ 90 ≤ 90 (coating materials)	≤ 100 ≤ 90 (coating materials)	CPSC-CH-E-1002-08.3 CPSC-CH-E-1003-09.1 (painted accessories)
Mercury (total amount)	mg/kg	≤ 1000 ≤ 10 (coating materials)		Microwave digestion ICP-MS/OES
Polychlorobiphenyls (PCB) (Appendix 19)	mg/kg	$\leq 0,1$ (coating materials)		Ref. EPA 3540C + EPA 8082A
Polychloronaphthalenes (PCN) (Appendix 20)	mg/kg	≤ 1 (coating materials)		Ref. EPA 3550C + EPA 8270E

Parameter Heavy Metals (extractable)	Unit	Requirements: Children (≤ 14 years)	Test method reference
Heavy metals (Appendix 10)	mg/kg	According to Category III	Extractable Heavy Metals: Hydrochloric Acid 0,07M (EN 71-3)

Additional Requirements for Painted and Coated Glass - Children Products (only for 0-3 years “Infants” and 3-13 years “Children”)

Parameter Heavy Metals (extractable)	Unit	Requirements	Test method reference
Antimony	mg/kg	≤ 60	KS G ISO 8124-3:2013 ISO 8124-3:1997 Hydrochloric Acid 0,07M
Arsenic	mg/kg	≤ 25	
Barium	mg/kg	≤ 1000	
Cadmium	mg/kg	≤ 75	
Chromium (total amount)	mg/kg	≤ 60	
Lead	mg/kg	≤ 90	
Mercury	mg/kg	≤ 60	
Selenium	mg/kg	≤ 500	



1.6 Wood and Similar (Bamboo, Cork, etc.)

Parameter		Unit	Requirements		Test method reference
			Babies (≤ 36 months)	Children (3-14 years) & Adults (>14 years)	
Acid boric		mg/kg	≤ 1000		Screening Test: acid digestion - ICP-MS; Specific Test: aqueous extraction - TEA derivatization - GC-MS
Asbestos (Appendix 2)		mg/kg	Not detected		Microscopic examination
Bisphenol A (BPA)		mg/kg	≤ 1 (coating materials)		Solvent extraction, LC-MS / GC-MS analysis
Dimethyl fumarate		mg/kg	$\leq 0,1$		ISO/TS 16186
Flame Retardants (Appendix 8)		mg/kg	Not detectable (≤ 5 mg/kg)		Extraction with organic solvent - Analysis by GC-MS; GC-ECD; LC-MS
Formaldehyde (free and extractable)		mg/kg	≤ 20	≤ 75	EN 717-3
Heavy Metals (total amount)	Arsenic	mg/kg	≤ 1		Microwave digestion - ICP-MS/OES
	Cadmium	mg/kg	≤ 40	≤ 40 (only for children) ≤ 100	EN 1122 Microwave digestion; ICP-MS/OES ref: CPSC-CH-E-1004-11
	Lead	mg/kg	≤ 40 (jewelry only) ≤ 90 ≤ 90 (coating materials)	≤ 40 (jewelry only ≤ 14) ≤ 90 (≤ 14 years) ≤ 90 (coating materials)	Microwave digestion; ICP-MS/OES - ref: CPSC-CH-E-1002-08.3 CPSC-CH-E-1003-09.1 (painted acc.)
	Mercury	mg/kg	≤ 1000 ≤ 10 (painted accessories)		Microwave digestion ICP-MS/OES
Mercury compounds (Appendix 11)		mg/kg	≤ 1 (mercury)		Microwave digestion; ICP-MS/OES
Organotin compounds: (Appendix 16)		mg/kg	$\leq 0,5$ (TBT, TBTO, TPhT) ≤ 1 (others)	≤ 1 (TBT, TBTO, TPhT) ≤ 2 (others)	ISO/TS 16179
Pentachlorophenol (PCP) Tetrachlorophenols (TeCP) Trichlorophenols (TCP) (Appendix 6)		mg/kg	$\leq 0,5$		BVL B 82.02-08 (modified) - Potassium Hydroxide extraction direct LC-MS analysis or derivatization followed by GC-MS analysis
Polychlorobiphenyls (PCB) (Appendix 19)		mg/kg	$\leq 0,1$ (coating materials)		Ref. EPA 3540C + EPA 8082A
Polychloronaphthalenes (PCN) (Appendix 20)		mg/kg	≤ 1 (coating materials)		Ref. EPA 3550C + EPA 8270E
Polycyclic Aromatic Hydrocarbons (IPA - PAH) (Appendix 21)		mg/kg	$\leq 0,5$	≤ 1	AfPS GS 2014:01 PAK



Parameter	Unit	Requirements		Test method reference
		Babies (≤ 36 months)	Children (3-14 years) & Adults (>14 years)	
Preservatives: Cyfluthrin, Cypermethrin, Deltamethrin, Lindane, Permethrin	mg/kg	≤ 5 Cyfluthrin, Cypermethrin, Deltamethrin, Permethrin ≤ 1 Lindane		EN 71-9: GC Test Method (GC-MS; GC-ECD); extraction ethylic alcohol/ acetic acid
Siloxanes (Appendix 22)	mg/kg	≤ 1000		Solvent extraction, GC-MS analysis
Solvents (Appendix 23)	mg/kg	According to dedicated appendix		GB 19340:2003 "Extraction HS-SPME or Purge &Trap and Analysis by GC-MS" ISO/TS 16189

PARAMETER Heavy Metals (extractable)	Unit	Requirements: Children (≤ 14 years)	Test method reference
Heavy metals (Appendix 10)	mg/kg	According to Category III	Extractable Heavy Metals: Hydrochloric Acid 0,07M (EN 71-3)

Additional Requirements for Painted and Coated Wood - Children Products (only for 0-3 years “Infants” and 3-13 years “Children”)					
Parameter Heavy Metals (extractable)	Unit		Requirements		Test method reference
Antimony	mg/kg		≤ 60		KS G ISO 8124-3:2013 ISO 8124-3:1997 Hydrochloric Acid 0,07M
Arsenic	mg/kg		≤ 25		
Barium	mg/kg		≤ 1000		
Cadmium	mg/kg		≤ 75		
Chromium (total amount)	mg/kg		≤ 60		
Lead	mg/kg		≤ 90		
Mercury	mg/kg		≤ 60		
Selenium	mg/kg		≤ 500		



1.7 Paper and similar

Parameter		Unit	Requirements	Test method reference
Heavy Metals (total amount)	Cadmium	mg/kg	≤ 100 (sum)	Microwave digestion ICP-MS/OES ref: CPSC-CH-E-1002-08.3; Cr VI: EN ISO 17075-2
	Chromium VI	mg/kg		
	Lead	mg/kg		
	Mercury	mg/kg		
Formaldehyde (free and extractable)		mg/kg	≤ 75	EN 645; EN 1541
Nonylphenols (NP) Octylphenols (OP) (Appendix 15)		mg/kg	≤ 100 (sum)	Extraction with organic solvent Analysis by GC-MS, ref: ISO 18857-1
Nonylphenoethoxylates (NPEO) Octylphenoethoxylates (OPEO) (Appendix 14)		mg/kg	≤ 100 (sum)	Extraction with organic solvent Analysis by LC-MS, ref: ISO 18254-1
Siloxanes (Appendix 22)		mg/kg	≤ 1000	Solvent extraction, GC-MS analysis



1.8 Requirements for Custom Jewellery (metal parts only)

Parameter	Unit	Requirements		Test method reference
		Children (≤ 14 years)	Adults (>14 years)	
Arsenic (total amount)	mg/kg	≤ 1000		Microwave digestion ICP-MS/OES; GB/T 21198-6 - GB/T 28021
Bisphenol A (BPA)	mg/kg	≤ 1 (coating materials)		Solvent extraction, LC-MS / GC-MS analysis
Cadmium (total amount)	mg/kg	≤ 40	≤ 100	Microwave digestion ICP-MS/OES ref: GB/T 28021
Chromium VI	mg/kg	≤ 1000		GB/T 28019
Lead (total amount)	mg/kg	≤ 40 ≤ 90 (coating materials)	≤ 100 ≤ 90 (coating materials)	Microwave digestion ICP-MS/OES ref: CPSC-CH-E-1001-08.3 CPSC-CH-E-1003-09.1 (painted acc.) GB/T 28021
Mercury (total amount)	mg/kg	≤ 1000 ≤ 10 (coating materials)		Microwave digestion ICP-MS/OES GB/T 21198-6 - GB/T 28021
Nickel (released from metal accessories in direct and prolonged contact with skin)	$\mu\text{g}/\text{cm}^2 \times \text{week}$	$\leq 0,50$ $\leq 0,20$ (only for pierced parts of human body)		EN 1811 (no coated, no painted and no plated accessories); EN 12472 + EN 1811 (coated, painted and plated accessories)

Extractable Heavy Metals (HCl 0,07M)	Unit	Requirements		Test method reference
		Children (≤ 14 years)	Adults (>14 years) only coated and painted materials	
Aluminium	mg/kg	≤ 70000	N.A.	ASTM F963-11 KS G ISO 8124-3:2013 ISO 8124-3:1997 EN 71-3 (Adult products: test only if coating material ≥ 10 mg)
Antimony	mg/kg	≤ 60		
Arsenic	mg/kg	≤ 25		
Barium	mg/kg	≤ 1000		
Cadmium	mg/kg	≤ 17	≤ 75	
Chromium (total)	mg/kg	≤ 60		
Chromium (VI)	mg/kg	≤ 0,053	N.A.	
Cobalt	mg/kg	≤ 130	N.A.	
Copper	mg/kg	≤ 7700	N.A.	
Lead	mg/kg	≤ 23	N.A.	
Manganese	mg/kg	≤ 15000	N.A.	
Mercury	mg/kg	≤ 60	≤ 60	
Nickel	mg/kg	≤ 930	N.A.	
Selenium	mg/kg	≤ 460		
Strontium	mg/kg	≤ 56000	N.A.	
Organotin Compounds	mg/kg	≤ 12	N.A.	
Tin	mg/kg	≤ 180000	N.A.	
Zinc	mg/kg	≤ 46000	N.A.	



1.9 Additional Requirements for Footwear

Rubber Shoes, Children's Footwear and Children's Canvas Rubber

Parameter		Field of application	Unit	Requirements			Test method reference
				Infants (≤ 36 months)	Children (3-14 years)	Adult Rubber Shoes	
Chlorinated phenols: PCP and 2,3,5,6-TeCP		Uppers,linings and insocks (textile,synthetic leather and artificial leather)	mg/kg	≤ 0,5			GB/T 18414.1 - 2
Heavy Metals (extractable)	Arsenic		mg/kg	≤ 1			GB/T 17593.4
	Cadmium		mg/kg	≤ 0,1			GB/T 17593.1
	Lead		mg/kg	≤ 1			GB/T 17593.1
pH Value			pH	4,0 ÷ 9,0			GB/T 7573
Chromium VI		Leather and fur	mg/kg	≤ 3			EN ISO 17075-2; GB/T 22807
Decomposable harmful aromatic amine dye (Appendix 9)		Textile, synthetic Leather, artificial leather, leather and fur	mg/kg	≤ 20 (textile) ≤ 30 (leather and fur)			GB/T 17592 textile; GB/T 19942 leather and fur
Dimethyl fumarate			mg/kg	≤ 0,1		N.A.	ISO/TS 16186; GB/T 26713
Formaldehyde			mg/kg	≤ 20	≤ 75	≤ 150	GB/T 2912.1 textile; GB/T 19941 leather and fur
Colour fastness to rubbing		Lining and insocks (staining)	gray scale	≥ 3	≥ 2/3		QB/T 2882
N-nitrosamines (Appendix 13)		Rubber components	mg/kg	≤ 0,5			GB/T 24153
Polycyclic Aromatic Hydrocarbons (IPA - PAH) (Appendix 21)			mg/kg	≤ 0,5	≤ 1	N.A.	Extraction with organic solvent Analysis by GC-MS
Odorous		All parts of footwear product		≤ 2			GB 30585
Organotin compounds: DOT			%	≤ 0,1% (1000 mg/kg)		N.A.	ISO/TS 16179
Phthalates (Appendix 18)	BBP, DBP, DEHP, DINP		mg/kg	≤ 50 (each)		N.A.	ISO/TS 16181; CPSC-CH-C1001-09.4
	DIDP, DNOP		mg/kg	≤ 1000 (sum)		N.A.	ISO/TS 16181; CPSC-CH-C1001-09.4

Parameter Heavy Metals (total amount)	Field of application	Unit	Requirements Children (≤ 14 years)	Test method reference
Arsenic	All components and materials	mg/kg	≤ 100	QB/T 4340
Cadmium				
Lead				



1.10 Additional Requirements for Children's Products in US Market

Several States (Maine, Oregon, Vermont, etc.) in the US enacted Regulations to map and possibly avoid the use of hazardous chemicals of concern in Children's Products. Suppliers must comply with the non-intentional use of these chemicals; in case of the use cannot be avoided, suppliers must inform us immediately.

A possible presence as contaminant is allowed if the total concentration of each chemical in the material/product is **under 100 mg/kg**. Suppliers must assure that this maximum level of contamination is respected. If the level of contamination is higher, the material/product is not compliant: suppliers must inform us immediately also in this case.

The chemicals involved are listed below. Some chemicals can have different requirements due to specific restrictions as reported in other the sections of this document. Please refer to the following table (limit in mg/kg), bearing in mind that for Children's products in US the total concentration limit is 100 mg/kg.

Substance	CAS No.	1.1 Textile	1.2 Leather & Fur	1.3 Plastic	1.4 Metal	1.5 Glass & Crystal	1.6 Wood & Similar	1.7 Paper & Similar	1.8 Jewelry	1.9 Footwear
1,1,2,2-Tetrachloroethane (Solvents)	79-34-5	1000	1000	1000			1000			
1,4-Dioxane	123-91-1									
2,4-Diaminotoluene (Azo Dyes)	95-80-7	20	30							
2-Aminotoluene (Azo Dyes)	95-53-4	20	30							
2-Ethylhexanoic acid	149-57-5									
2-ethylhexyl-2,3,4,5-tetrabromobenzoate (TBB) (Flame Retardants)	183658-27-7	5	5	5			5			
2-Ethyl-hexyl-4-methoxycinnamate	5466-77-3									
2-Methoxyethanol (Solvents)	109-86-4	10	10	10			10			
3,3'-Dimethylbenzidine (Azo Dyes)	119-93-7	20	30							
4-chloroaniline (Azo Dyes)	106-47-8	20	30							
4-Hydroxybenzoic acid	99-96-7									
4-Nonylphenol (Nonylphenols and Octylphenols)	104-40-5	100 (sum)	100 (sum)					100 (sum)		
4-Nonylphenol, branched (Nonylphenols and Octylphenols)	84852-15-3	100 (sum)	100 (sum)					100 (sum)		
4-Nonylphenol, branched, ethoxylated (Nonylphenolethoxylates and Octylphenolethoxylates)	127087-87-0	100 (sum)	100 (sum)					100 (sum)		
4-Nonylphenol, ethoxylated (Nonylphenolethoxylates and Octylphenolethoxylates)	26027-38-3	100 (sum)	100 (sum)					100 (sum)		
4-Nonylphenyl-polyethylene glycol (Nonylphenolethoxylates and Octylphenolethoxylates)	9016-45-9	100 (sum)	100 (sum)					100 (sum)		
4-Octylphenol (Nonylphenols and Octylphenols)	1806-26-4	100 (sum)	100 (sum)					100 (sum)		
4-tert-Octylphenol (Nonylphenols and Octylphenols)	140-66-9	100 (sum)	100 (sum)					100 (sum)		
Acetaldehyde	75-07-0									
Acrylonitrile	107-13-1									
Aniline	62-53-3									
Antimony (Heavy Metals)	7440-36-0	*extractable	*extractable	*extractable	*extractable	*extractable	*extractable			
Antimony Compounds (Heavy Metals)	various	*extractable	*extractable	*extractable	*extractable	*extractable	*extractable			
Arsenic (Heavy Metals)	7440-38-2	*extractable	1	*extractable	*extractable	*extractable	1			100
Arsenic Compounds (Heavy Metals)	various	*extractable	1	*extractable	*extractable	*extractable	1			100
Arsenic trioxide	1327-53-3									

Substance	CAS No.	1.1 Textile	1.2 Leather & Fur	1.3 Plastic	1.4 Metal	1.5 Glass & Crystal	1.6 Wood & Similar	1.7 Paper & Similar	1.8 Jewelry	1.9 Footwear
Benzene (Solvents)	71-43-2	5	5	5			5			
Benzophenone-2 (Bp-2)	131-55-5									
Bis (2-ethylhexyl) tetrabromophthalate (TBPH) (Flame Retardants)	26040-51-7	5	5	5			5			
Bis(chloromethyl)propane-1,3-diyl tetrakis-(2-chloroethyl) bis(phosphate) (V6)	38051-10-4									
Bisphenol A (BPA)	80-05-7			*extractable						
Bisphenol F (BPF)	620-92-8									
Bisphenol S (BPS)	80-09-1									
Butyl benzyl phthalate (BBP) (Phthalates)	85-68-7	50	50	50						50
Butyl paraben	94-26-8									
Butylated hydroxyanisole (BHA)	25013-16-5									
C.I. solvent yellow 14	842-07-9									
Cadmium (Heavy Metals)	7440-43-9	40	40	40	40	40	40	100 (sum)	40	100
Cadmium Compounds (Heavy Metals)	various	40	40	40	40	40	40	100 (sum)	40	100
Carbon disulfide	75-15-0									
Chlorinated paraffins	108171-26-2									
Cobalt (Co) (Heavy metals)	7440-48-4	*extractable		*extractable	*extractable	*extractable	*extractable			
Cobalt Compounds (Heavy metals)	various	*extractable		*extractable	*extractable	*extractable	*extractable			
Decabromodiphenyl ethane (DBDPE)	84852-53-9									
Decabromodiphenyl ether (BDE-209) (Flame Retardants)	1163-19-5	5	5	5			5			
Di-(2-methoxyethyl) phthalate (DMEP) (Phthalates)	117-82-8	1000 (sum)	1000 (sum)	1000 (sum)						
Di-2-ethylhexyl phthalate (DEHP) (Phthalates)	117-81-7	50	50	50						50
Dicyclohexyl phthalate (DCHP) (Phthalates)	84-61-7	500	500	500						
Diethyl phthalate (DEP) (Phthalates)	84-66-2	500	500	500						
Diisobutyl phthalate (DIBP) (Phthalates)	84-69-5	50	50	50						
Diisodecyl phthalate (DIDP) (Phthalates)	26761-40-0	1000 (sum)	1000 (sum)	1000 (sum)						1000 (sum)
Diisononyl phthalate (unbranched) (DINP) (Phthalates)	28553-12-0	50	50	50						50
Dimethyl arsenic acid	75-60-5									
Di-n-butyl phthalate (DBP) (Phthalates)	84-74-2	50	50	50						50
Di-n-hexyl phthalate (DnHP) (Phthalates)	84-75-3	1000 (sum)	1000 (sum)	1000 (sum)						
Di-n-octyl phthalate (DnOP) (Phthalates)	117-84-0	1000 (sum)	1000 (sum)	1000 (sum)						1000 (sum)
Dipentyl phthalate (DPP) (Phthalates)	131-18-0	1000 (sum)	1000 (sum)	1000 (sum)						
Estragole	140-67-0									
Ethyl paraben	120-47-8									
Ethylbenzene	100-41-4									
Ethylene glycol	107-21-1									

Substance	CAS No.	1.1 Textile	1.2 Leather & Fur	1.3 Plastic	1.4 Metal	1.5 Glass & Crystal	1.6 Wood & Similar	1.7 Paper & Similar	1.8 Jewelry	1.9 Footwear
Ethylene glycol monoethyl ether	110-80-5									
Ethylhexyl diphenyl phosphate (EHDPP)	1241-94-7									
Formaldehyde and formaldehyde releasing compounds ⁽¹⁾	50-00-0	16	20				20	20		20
Hexabromocyclododecane (Flame Retardants)	25637-99-4	5	5	5			5			
Hexachlorobenzene (Biocides + Chlorobenzenes and Chlorotoluenes)	118-74-1	0,5	0,5							
Hexachlorobutadiene (HCDB)	87-68-3									
Isopropylated triphenyl phosphate (IPTPP)	68937-41-7									
Lead (Heavy Metals)	7439-92-1	90	90	90	90	90	90	100 (sum)	40	100
Lead Compounds (Heavy Metals)	various	90	90	90	90	90	90	100 (sum)	40	100
Mercury (Heavy Metals + Mercury Compounds)	7439-97-6	1	1	10	10	10	1	100 (sum)	*extractable	
Mercury Compounds (Heavy Metals + Mercury Compounds)	various	1	1	10	10	10	1	100 (sum)	*extractable	
Methyl ethyl ketone	78-93-3									
Methyl mercury	22967-92-6									
Methyl paraben	99-76-3									
Methylene chloride (Solvents)	75-09-2	50 (sum)	50 (sum)	50 (sum)			50 (sum)			
Molybdenum	7439-98-7									
Molybdenum Compounds	various									
N-Methylpyrrolidone (Solvents)	872-50-4	1000	1000	1000			1000			
N-nitrosodimethylamine (N-nitrosamines)	62-75-9									0,5
N-Nitrosodiphenylamine	86-30-6									
Nonyl phenol (Nonylphenols and Octylphenols)	140-40-5	100 (sum)	100 (sum)					100 (sum)		
Octamethylcyclotetrasiloxane	556-67-2									
Pentachlorobenzene (Chlorobenzenes and Chlorotoluenes)	608-93-5	1								
Perfluorooctanesulfonates (PFOS)	1763-23-1	1 µg/m ²	1 µg/m ²							
Perfluorooctanoic Acid (PFOA)	335-67-1	25 µg/kg	25 µg/kg							
PFAS: PFOA-related substances	various	1	1							
PFAS: Long chain perfluoralkyl acids (C9-C14)	various	25 µg/kg	25 µg/kg							
PFAS: Long chain perfluoralkyl related substances (C9-C14)	various	260 µg/kg	260 µg/kg							
Phenol	108-95-2									
Phthalic anhydride	85-44-9									
Polyoxyethylene nonylphenylether, branched (NPEs 3-18) (Nonylphenolethoxylates and Octylphenolethoxylates)	68412-54-4	100 (sum)	100 (sum)					100 (sum)		
Propyl paraben	94-13-3									
Short-chain chlorinated paraffins (SCCP)	85535-84-8	50	50	50						
Styrene	100-42-5									
Tetrabromobisphenol A (TBBPA) (Flame Retardants)	79-94-7	5	5	5			5			

Substance	CAS No.	1.1 Textile	1.2 Leather & Fur	1.3 Plastic	1.4 Metal	1.5 Glass & Crystal	1.6 Wood & Similar	1.7 Paper & Similar	1.8 Jewelry	1.9 Footwear
Tetrachloroethene (Solvents)	127-18-4	1000	1000	1000			1000			
Toluene (Solvents)	108-88-3	200	200	200			200			
Tricresyl phosphate (TCP)	1330-78-5									
Tri-n-butyl phosphate (TNBP)	126-73-8									
Triphenyl phosphate (TPP)	115-86-6									
Tris (2,3-dibromopropyl) phosphate (TDBPP) (Flame Retardants)	126-72-7	5	5	5			5			
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) (Flame Retardants)	13674-87-8	5	5	5			5			
Tris(1-chloro-2-propyl) phosphate (TCPP) (Flame Retardants)	13674-84-5	5	5	5			5			
Tris(2-chloroethyl) phosphate (TCEP) (Flame Retardants)	115-96-8	5	5	5			5			
Unbekanntes Farbmittel 94 (SIN list) (Nonylphenolethoxylates and Octylphenolethoxylates)	37205-87-1	100 (sum)	100 (sum)					100 (sum)		
(1) Formaldehyde releasing compounds are defined as "substances that are intentionally added to release formaldehyde". Among these substances, we can list many preservatives, as 5-Bromo-5-nitro-1,3-dioxane, Bronopol, Diazolidinyl urea, DMDM hydantoin (1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione), Imidazolidinyl urea, Phenylmethoxy methanol, Methenamine, Quaternium-15, Sodium N-(hydroxymethyl) glycinate, etc.										



2. KERING PRODUCT SAFETY REQUIREMENTS

2.1 Main Requirements (All Products)

Parameter	Field of application	Requirements	Test method reference
Drawstrings	≤ 14 years	According to Test method reference	GB 31701 EN 14682 ASTM F1816
Magnetic component	≤ 14 years	≤ 8 years: No magnetic component	ISO 8124-1
		> 8 years: Magnetic Flux Index < 50 kG ² mm ² and in compliance in small part test Specific warning is mandatory	
Sharp edge	All products	No sharp edge	GB/T 31702; EN-71-1; 16 CFR Parts 1500.49 ASTM F 963 4.7
Sharp point	All products	No sharp point	GB/T 31702 ; EN-71-1 ; 16 CFR Parts 1500.48 ASTM F 963 4.8
Small parts	≤ 36 months	No small parts	GB 31701; EN-71-1 16 CFR Parts 1501 ASTM F 963 4.6



2.2 Flammability for Textile (Raw Material and Finished Product)

Field of application	Requirements	Country	Test method reference
Children Sleepwear (0-14 years)	Flame spread time. When tested in accordance with ISO 6941 the flame spread time shall be 12 sec. or greater in the lengthwise direction and the width-wise direction, and no one determination of the time to burn a test specimen shall be less than 10 seconds in either the lengthwise direction or the width-wise direction.	Australia	AS/NZS 1249:2014
	An average char length for five specimens that does not exceed 178 mm; and not more than one individual specimen with a char length equal to the full length of the specimen (254 mm). Remark: tight-fitting sleepwear when tested in accordance with CGSB standard CAN/CGSB 4.2 No. 27.5 must have a flame spread time of more than seven seconds.	Canada	Method F-17
	According to field of application and test method reference. From size 9 (one-piece garment, exceed 64.8 cm in length; if a two-piece garment, has piece exceeding 40 cm in length) up to size 14	USA	16 CFR Parts 1615 & 1616
Children's textile products (0-14 years)	The outer-layer fabrics (and lining that can be exposed during normal use of the products) are examined; wool, acrylic, modified acrylic, polyamide, polypropylene and polyester textiles as well as the textiles of these fiber blending are not examined; the textiles with mass per unit area greater than 90g/m2 are not examined. Plain Surface Fabric: Class 1; Raised Surface Fabric: Class 1.	China	GB/T 14644
Children & Adults Clothing	The flame spread over 127 mm may not be shorter than 4 seconds.	Netherlands	ASTM D1230
	Clothing Products for children in sizes up to and including 170 cm by testing the fabric should not have a life of 7 seconds or less. Clothing Products for adults: flame spread of 127 mm must be no less than 4 seconds. Other apparel products and fabric suitable for clothing such as when testing the fabric should not have a burn time of 5 seconds or less.	Norway	ASTM D1230-61
	Textile materials should not be flammable and combustible that they pose a disproportionately high risk. Garments, and yarns for the manufacture of garments should not have rapid flame spread on its surface.	Switzerland	SN EN 1101; SN EN 1102; SN EN 1103
	Plain Surface Fabric: Class 1; Raised Surface Fabric: Class 1 - Class 2. Exemption: Plain surface fabrics: with weight exceeding 2.6 oz/yd2 (about 88 g/m2) or not weight dependent if obtained entirely or with a blend only made of the following fibers: acrylic, mod acrylic, nylon, olefin, polyester, wool. Raised surface fabrics: not weight dependent if obtained entirely or with a blend only made of the following fibers: acrylic, mod acrylic, nylon, olefin, polyester, wool.	USA	16 CFR Parts 1610
Children & Adults Nightwear	Children's nightwear: marker thread (520 mm) not severed in less than 17 seconds, no ignition of filter paper by flaming debris in less than 17 seconds. Adult nightwear: marker thread (520 mm) not severed in less than 10 seconds and no ignition of filter paper by flaming debris in less than 10 seconds.	Netherlands	EN 1103
	Meet Flammability Standard BS 5722 or labelled appropriately: 300 mm trip threat not severed in less than 25 seconds and 600 mm trip thread not severed in less than 50 seconds.	UK	BS 5722; BS 5438; BS 5651
General textile products	Textile product are prohibited if they have a flame spread time of one of the following: 3.5 seconds or less, if the product does not have a raised fiber surface; or 4 seconds or less, if the product has a raised fiber surface and exhibits ignition or fusion of its base fibers.	Canada	CAN/CGSB 4.2 N. 27.5-94
	Textile materials should not be flammable and combustible that they pose a disproportionately high risk. Garments, and yarns for the manufacture of garments should not have rapid flame spread on its surface.	Switzerland	SN EN 1101; SN EN 1102; SN EN 1103
Vinyl plastic film	The rate of burning shall not exceed 1.2 in/sec.	USA	16 CFR 1611



2.3 Hygiene and Cleanliness for Feather and Down

Parameter	Unit	Requirements	Test method reference
Mesophilic aerobic microbial count	Colony Forming units (CFU/g)	$< 10^6$	EN 1884
Oxygen index number	Oxygen index number	≤ 20	EN 1162
		$\leq 4,8$	JIS L1903
		≤ 10	ASTM D-4522
Salmonella	Colony Forming units (CFU/g)	Absent in 20 g	EN 1884
Streptococci	Colony Forming units (CFU/g)	$< 10^2$	EN 1884
Sulphite reducing clostridia count	Colony Forming units (CFU/g)	$< 10^2$	EN 1884

3. GLOSSARY: abbreviations and definitions

- CAS = Chemical Abstracts Service. CAS Registry Numbers (often referred to as CAS RNs or CAS Numbers) are unique identifiers for chemical substances.
- CEN = European Committee for Standardization.
- CEN/TS = Technical Specification established by CEN.
- CPSC = Consumer Product Safety Commission. Main U.S. government agency responsible for product safety and for enforcement of CPSIA.
- CPSIA = Consumer Product Safety Improvement Act.
- CFU (Colony Forming Units) = unit used to estimate the number of viable bacteria or fungal cells in a sample: the value shown is the base 10 logarithms of the concentration.
- DIN = German Institute for Standardisation (Deutsches Institut für Normung).
- ECD = Electron Capture Detector.
- EN = European Standard.
- EPA = Environmental Protection Agency (U.S.).
- GB = Chinese national standards issued by the Standardization Administration of China (SAC), the Chinese National Committee of the ISO and IEC. GB are mandatory standards.
- GB/T = "recommended" Chinese standards.
- GC-MS = Gas Chromatography/Mass Spectrometer.
- ICP-MS = Inductively Coupled Plasma Mass Spectrometry.
- ISO = International Organization for Standardization.
- ISO/TS = ISO technical specification.
- JIS = Japanese Industrial Standard.
- LFGB = Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch - German Law Book on food, consumer article and feed.
- LC-MS = Liquid Chromatography/Mass Spectrometer.
- mg/L = milligram per liter.
- mg/kg = milligram per kilogram, unit describing concentrations of chemical substances. 1 mg/kg can also be notated as 1 ppm (Parts Per Million) or 1 microgram per gram ($\mu\text{g/g}$).
- pH = potential of hydrogen, is a numeric scale used to specify the acidity or basicity of an aqueous solution.
- N.A. = Not applicable.
- Not detectable ($\leq \text{XX mg/kg}$) = the number XX is the lowest limit value which can be detected by the selected test method.
- Not detected = the substance must not be present in the finished product.
- REACH = Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals.
- SPME = Solid-phase micro extraction.
- SVHC = Substance of Very High Concentration.
- TLC = Thin-Layer Chromatography.
- UNI = Ente Nazionale Italiano di Unificazione, is a non-profit private association recognized by Italian State and the European Union.

4. TRANSLATION OF UNITS: conversion table for mg/kg (ppm) and %

mg/kg (ppm)	0,01	0,1	1	10	100	1.000	10.000	100.000	1000.000
%	0,000001	0,00001	0,0001	0,001	0,01	0,1	1	10	100

5. APPENDIX: INDIVIDUAL SUBSTANCES

1. Allergenic Disperse Dyes
2. Asbestos
3. Biocides
4. Carcinogenic Dyes
5. Chlorobenzenes and Chlorotoluenes
6. Chlorophenols
7. Dioxin and Furans
8. Flame Retardants
9. Forbidden Aryl amines
10. Heavy Metals (extractable)
11. Mercury compounds
12. Navy Blue
13. N-nitrosamines
14. Nonylphenolethoxylates (NPEO) - Octylphenolethoxylates (OPEO)
15. Nonylphenols (NP) - Octylphenols (OP)
16. Organotin compounds
17. PFAS
18. Phthalates
19. Polychlorobiphenyls (PCB)
20. Polychloronaphthalenes (PCN)
21. Polycyclic Aromatic Hydrocarbons (IPA - PAH)
22. Siloxanes
23. Solvents: Chlorinated Solvents, Volatile Organic Compound (VOC) and Other Solvents
24. UV-Stabilizers

Appendix 1: Allergenic Disperse Dyes		C.I. No.	CAS No.
1	C.I. Disperse Blue 1	C.I. 64 500	2475-45-8
2	C.I. Disperse Blue 3	C.I. 61 505	2475-46-9
3	C.I. Disperse Blue 7	C.I. 62 500	3179-90-6
4	C.I. Disperse Blue 26	C.I. 63 305	3860-63-7
5	C.I. Disperse Blue 102		12222-97-8
6	C.I. Disperse Blue 106		12223-01-7
7	C.I. Disperse Blue 124		61951-51-7
8	C.I. Disperse Brown 1		23355-64-8
9	C.I. Disperse Orange 1	C.I. 11 080	2581-69-3
10	C.I. Disperse Orange 3	C.I. 11 005	730-40-5
11	C.I. Disperse Orange 37/76	C.I. 11 132	12223-33-5
12	C.I. Disperse Orange 59	C.I. 11 132	
13	C.I. Disperse Orange 149 ^(*)		85136-74-9
14	C.I. Disperse Red 1	C.I. 11 110	2872-52-8
15	C.I. Disperse Red 11	C.I. 62 015	2872-48-2
16	C.I. Disperse Red 17	C.I. 11 210	3179-89-3
17	C.I. Disperse Yellow 1	C.I. 10 345	119-15-3
18	C.I. Disperse Yellow 3	C.I. 11 855	2832-40-8
19	C.I. Disperse Yellow 9	C.I. 10 375	6373-73-5
20	C.I. Disperse Yellow 23 ^(*)		6250-22-3
21	C.I. Disperse Yellow 39		12236-29-2
22	C.I. Disperse Yellow 49		54824-37-2
(*) Azo dye from which forbidden aryl amine (4-amino azobenzene) can be split off under reductive conditions.			

Appendix 2: Asbestos		CAS No.
1	Actinolite	77536-66-4
2	Amosite	12172-73-5
3	Anthophyllite	77536-67-5
4	Chrysotile	12001-29-5
5	Crocidolite	12001-28-4
6	Tremolite	77536-68-6



Appendix 3: Biocides		CAS No.
1	Aldrine	309-00-2
2	Azinophosetyl	2642-71-9
3	Azinophosmethyl	86-50-0
4	Bromophos-ethyl	4824-78-6
5	Captafol	2425-06-1
6	Carbaryl	63-25-2
7	Chlordane	57-74-9
8	Chlordimeform	6164-98-3
9	Chlorphenvinphos	470-90-6
10	Coumaphos	56-72-4
11	Cyfluthrin	68359-37-5
12	Cyhalothrin	91465-08-6
13	Cypermethrin	52315-07-8
14	DDD	53-19-0, 72-54-8
15	DDE	3424-82-6, 72-55-9
16	DDT	50-29-3, 789-02-6
17	DEF	78-48-8
18	Deltamethrin	52918-63-5
19	Diazinon	333-41-5
20	Dichlorprop	120-36-5
21	Dicrotophos	141-66-2
22	Dieldrin	60-57-1
23	Dimethoate	60-51-5
24	Dinoseb and salts	88-85-7
25	DTTB	57648-21-2
26	Endosulfan (α)	959-98-8
27	Endosulfan (β)	33213-65-9
28	Endrine	72-20-8
29	Esfenvalerat	66230-04-4

Appendix 3: Biocides		CAS No.
30	Fenvalerate	51630-58-1
31	Heptachlor	76-44-8
32	Heptachlorepoide	1024-57-3
33	Hexachlorobenzene	118-74-1
34	α -Hexachlorcyclohexane	319-84-6
35	β -Hexachlorcyclohexane	319-85-7
36	δ -Hexachlorcyclohexane	319-86-8
37	Lindane (g-HCH)	58-89-9
38	Malathion	121-75-5
39	MCPA	94-74-6
40	MCPB	94-81-5
41	Mecroprop	93-65-2
42	Metamidophos	10265-92-6
43	Methoxychlor	72-43-5
44	Mirex	2385-85-5
45	Monocrotophos	6923-22-4
46	Parathion	56-38-2
47	Parathion-methyl	298-00-0
48	Permethrin	52645-53-1
49	Phosdrin/Mevinphos	7786-34-7
50	Profenophos	41198-08-7
51	Propethamphos	31218-83-4
52	Quinalphos	13593-03-8
53	Toxaphen (Camphechlor)	8001-35-2
54	Trifluralin	1582-09-8
55	2,4,5-T	93-76-5
56	2,4-D	94-75-7
57	Dicofol	115-32-2
58	Chlordecone (Kepone)	143-50-0

Appendix 4: Carcinogenic Dyes		C.I. No.	CAS No.
1	C.I. Acid Red 26	C.I. 16 150	3761-53-3
2	C.I. Acid Red 114		6459-94-5
3	C.I. Basic Blue 26		2580-56-5
4	C.I. Basic Green 4 (Chloride)		569-64-2
5	C.I. Basic Green 4 (Free)		10309-95-2
6	C.I. Basic Green 4 (Oxalate)		2437-29-8 18015-76-4
7	C.I. Basic Red 9	C.I. 42 500	569-61-9
8	C.I. Basic Violet 3		548-62-9
9	C.I. Basic Violet 14	C.I. 42 510	632-99-5
10	C.I. Direct Black 28	C.I. 35260	6745-67-1
11	C.I. Direct Black 38	C.I. 30 235	1937-37-7
12	C.I. Direct Blue 6	C.I. 22 610	2602-46-2
13	C.I. Direct Blue 15		2429-74-5
14	C.I. Direct Brown 95		16071-86-6
15	C.I. Direct Red 28	C.I. 22 120	573-58-0
16	C.I. Disperse Blue 1	C.I. 64 500	2475-45-8
17	C.I. Disperse Yellow 3	C.I. 11 855	2832-40-8
18	C.I. Disperse Yellow 23 ^(*)	C.I. 26 070	6250-23-3
19	C.I. Disperse Orange 11	C.I. 60700	82-28-0
20	C.I. Disperse Orange 149 ^(*)		85136-74-9
21	C.I. Pigment Red 104	C.I. 77605	12656-85-8
22	C.I. Pigment Yellow 34	C.I. 77603	1344-37-2
23	C.I. Solvent Yellow 1	C.I. 11100	60-09-3
24	C.I. Solvent Yellow 3		97-56-3
(*) Azo dye from which forbidden aryl amine (4-amino azobenzene) can be split off under reductive conditions			

Appendix 5: Chlorobenzenes and Chlorotoluenes		CAS No.
1	Chlorotoluenes (all isomers)	25168-05-2
2	Dichlorobenzenes (all isomers)	25321-22-6
3	Dichlorotoluenes (all isomers)	29797-40-8
4	Hexachlorobenzene	118-74-1
5	Pentachlorobenzene	608-93-5
6	Pentachlorotoluene	877-11-2
7	Tetrachlorobenzenes	634-66-2 634-90-2 95-94-3
8	Tetrachlorotoluenes	2136-89-2 5216-25-1
9	Trichlorobenzenes (all isomers)	12002-48-1
10	Trichlorotoluenes	2077-46-5 98-07-7

Appendix 6: Chlorophenols		CAS No.
1	Pentachlorophenol (PCP)	87-86-5
2	2,3,5,6 Tetrachlorophenols	935-95-5
3	2,3,4,6 Tetrachlorophenols	58-90-2
4	2,3,4,5 Tetrachlorophenols	4901-51-3
5	2,3,4-Trichlorophenol	15950-66-0
6	2,3,5-Trichlorophenol	933-78-8
7	2,3,6-Trichlorophenol	933-75-5
8	2,4,5-Trichlorophenol	95-95-4
9	2,4,6-Trichlorophenol	88-06-2
10	3,4,5-Trichlorophenol	609-19-8



Appendix 7: Dioxin and Furans		CAS No.	Group	Limit (µg/kg)
1	1,2,3,7,8-pentachlorodibenzo-p-dioxin	40321-76-4	1	≤ 1
2	2,3,4,7,8-pentachlorodibenzo-furan	57117-31-4		
3	2,3,7,8-tetrachlorodibenzo-furan	51207-31-9		
4	2,3,7,8-tetrachlorodibenzo-p-dioxin	1746-01-6		
5	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	39227-28-6	2	≤ 5
6	1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	57653-85-7		
7	1,2,3,6,7,8-hexachlorodibenzofuran	57117-44-9		
8	1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	19408-74-3		
9	1,2,3,7,8,9-hexachlorodibenzofuran	57117-41-6		
10	1,2,3,7,8-pentachlorodibenzofuran	57117-41-6		
11	2,3,4,6,7,8-hexachlorodibenzofuran	60851-34-5	3	≤ 100
12	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	35822-46-9		
13	1,2,3,4,6,7,8-heptachlorodibenzofuran	67562-39-4		
14	1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin	3268-87-9		
15	1,2,3,4,6,7,8,9-octachlorodibenzofuran	39001-02-0		
16	1,2,3,4,7,8,9-heptachlorodibenzofuran	55673-89-7		
17	1,2,3,7,8-pentabromodibenzo-p-dioxin	109333-34-8	4	≤ 1
18	2,3,4,7,8-pentabromodibenzofuran	131166-92-2		
19	2,3,7,8-tetrabromodibenzofuran	67733-57-7		
20	2,3,7,8-tetrabromodibenzo-p-dioxin	50585-41-6		
21	1,2,3,4,7,8-hexabromodibenzo-p-dioxin	110999-44-5	5	≤ 5
22	1,2,3,6,7,8-hexabromodibenzo-p-dioxin	110999-45-6		
23	1,2,3,7,8-pentabromodibenzofuran	107555-93-1		
24	1,2,3,7,8,9-hexabromodibenzo-p-dioxin	110999-46-7		

Appendix 8: Flame Retardants		Short form	CAS No.
1	Bis-(2,3-dibromopropyl ether) of tetrabromobisphenol	BDBPT	21850-44-2
2	Bis-(2,3-dibromopropyl)phosphate	BIS	5412-25-9
3	Decabromodiphenylether	DecaBDE	1163-19-5
4	Heptabromodiphenylether	HeptaBDE	various
5	Hexabromocyclododecane	HBCDD	25637-99-4
6	Hexabromodiphenylether	HexaBDE	36483-60-0
7	Octabromodiphenylether	OctaBDE	32536-52-0
8	Pentabromodiphenylether	PBDE	32534-81-9
9	Nonabromodiphenylethers	NonaBDE	various
10	Polybrominated Biphenyls (hexa-)	PBB	59536-65-1
11	Tetrabromobisphenol A	TBBPA	79-94-7
12	Tetrabromodiphenylether	TetraBDE	5436-43-1
13	Tri(aziridin-1-yl)phosphine oxide	TEPA	5455-55-1
14	Tris-(chloroisopropyl)phosphate	TCPP	13674-84-5
15	Tris-(1,3-dichloro-2-propyl)phosphate	TDCPP	13674-87-8
16	Tris-(2-chloroethyl)phosphate	TCEP	115-96-8
17	Tris-(2,3-dibromopropyl)phosphate	TRIS - TDBPP	126-72-7
18	2,2-Bis(bromomethyl)-1,3-propanediol	BBMP	3296-90-0
19	2-Ethylhexyl-2,3,4,5-tetrabromobenzoate	TBB	183658-27-7
20	Bis(2-ethylhexyl)-2,3,4,5-tetrabromophthalate	TBPH	26040-51-7
21	Dibromobiphenyls	DiBB	various
22	Tribromobiphenyls	TriBB	various
23	Tetrabromobiphenyls	TetraBB	various
24	Pentabromobiphenyls	PentaBB	various
25	Heptabromobiphenyls	HeptaBB	various
26	Octabromobiphenyls	OctaBB	various
27	Nonabromobiphenyls	NonaBB	various
28	Decabromobiphenyl	DeacaBB	13654-09-6



Appendix 9: Forbidden Aryl amines		Index No.	CAS No.
1	Benzidine	612-042-00-2	92-87-5
2	Biphenyl-4-ylamin; 4-aminobiphenyl; xenylamine	612-072-00-6	92-67-1
3	o-aminoazotoluene; 4-amino-2',3-dimethylazobenzene; 4-o-tolylazo-otoluidine	611-006-00-3	97-56-3
4	o-anisidine; 2-methoxyaniline	612-035-00-4	90-04-0
5	o-toluidine; 2-aminotoluene	612-091-00-X	95-53-4
6	2,4-xylydine		95-68-1
7	2,4,5-trimethylaniline		137-17-7
8	2,6-xylydine		87-62-7
9	2-naphtylamine	612-022-00-3	91-59-8
10	3,3'-dichlorobenzidine; 3,3'-dichlorobiphenyl-4; 4'-ylenediamine	612-068-00-4	91-94-1
11	3,3'-dimethoxybenzidine; o-dianisidine	612-036-00-X	119-90-4
12	3,3-dimethylbenzidine; 4,4'-bi-o-toluidine	612-041-00-7	119-93-7
13	4,4'-methylenedianiline; 4,4'-diaminodiphenylmethane	612-051-00-1	101-77-9
14	4,4'-methylenedi-o-toluidine	612-085-00-7	838-88-0
15	4,4'-methylene-bis (2-chloro-aniline); 2,2'-dichloro-4,4'-methylenedianiline	612-078-00-9	101-14-4
16	4,4'-oxydianiline		101-80-4
17	4,4'-thiodianiline		139-65-1
18	4-amino azobenzene	611-008-00-4	60-09-3
19	4-chloroaniline		106-47-8
20	4-chloro-o-toluidine		95-69-2
21	4-methoxy-m-phenylenediamine		615-05-4
22	4-methyl-m-phenylenediamine	612-099-00-3	95-80-7
23	5-nitro-o-toluidine		99-55-8
24	6-methoxy-m-toluidine; p-cresidine		120-71-8
25	chloro-o-toluidinium chloride		3165-93-3
26	2-Naphthylammoniumacetate		553-00-4
27	4-methoxy-m-phenylene diammonium sulphate		39156-41-7
28	2,4,5-trimethylaniline hydrochloride		21436-97-5



Appendix 10: Heavy Metals (extractable) EN 71-3		Short form	CAS No.	Unit	Category I Solid materials which may leave residues on the hands	Category II Fluid or viscous materials which can be ingested or have skin contact	Category III Solid materials which can be ingested by biting, tooth scraping, sucking or licking
1	Aluminium	Al	7429-90-5	mg/kg	5625	1406	70000
2	Antimony	Sb	7440-36-0	mg/kg	45	11,3	560
3	Arsenic	As	7440-38-2	mg/kg	3,8	0,9	47
4	Barium	Ba	7440-39-3	mg/kg	1500	375	18750
5	Boron	B	7440-42-8	mg/kg	1200	300	15000
6	Cadmium	Cd	7440-43-9	mg/kg	1,3	0,3	17
7	Chromium III	Cr (III)	7440-47-3	mg/kg	37,5	9,4	460
8	Chromium VI	Cr (VI)	18540-29-9	mg/kg	0,02	0,005	0,053
9	Cobalt	Co	7440-48-4	mg/kg	10,5	2,6	130
10	Copper	Cu	7440-50-8	mg/kg	622,5	156	7700
11	Lead	Pb	7439-92-1	mg/kg	2,0	0,5	23
12	Manganese	Mn	7439-96-5	mg/kg	1200	300	15000
13	Mercury	Hg	7439-97-6	mg/kg	7,5	1,9	94
14	Nickel	Ni	7440-02-0	mg/kg	75	18,8	930
15	Selenium	Se	7782-49-2	mg/kg	37,5	9,4	460
16	Strontium	Sr	7440-24-6	mg/kg	4500	1125	56000
17	Tin	Sn	7440-31-5	mg/kg	15000	3750	180000
18	Organic tin	Sn	various	mg/kg	0,9	0,2	12
19	Zinc	Zn	7440-66-6	mg/kg	3750	938	46000

Appendix 11: Mercury compounds		CAS No.
1	Phenylmercury acetate	62-38-4
2	Phenylmercury neodecanoate	26545-49-3
3	Phenylmercury octanoate	13864-38-5
4	Phenylmercury propionate	103-27-5
5	Phenylmercury 2-ethylhexanoate	13302-00-6

Appendix 12: Navy Blue		CAS No.
1	Navy Blue	118685-33-9

Appendix 13: N-nitrosamines		CAS No.
1	N-nitrosodiethylamine	55-18-5
2	N-nitrosodibutylamine	924-16-3
3	N-nitrosodimethylamine	62-75-9
4	N-nitrosodipropylamine	621-64-7
5	N-nitrosomorpholine	59-89-2
6	N-nitroso-N-ethylaniline	612-64-6
7	N-nitroso-N-methylaniline	614-00-6
8	N-nitrosopiperidine	100-75-4
9	N-nitrosopyrrolidine	930-55-2

Appendix 14: Nonylphenoethoxylates (NPEO) - Octylphenoethoxylates (OPEO)		CAS No.
1	Nonylphenol Ethoxylates NPEO ₍₁₋₂₎	Various
2	Nonylphenol Ethoxylates NPEO ₍₃₋₁₈₎	Various
3	Octylphenol Ethoxylates OPEO ₍₁₋₂₎	Various
4	Octylphenol Ethoxylates OPEO ₍₃₋₁₈₎	Various
5	Unbekanntes Farbmittel 94 (SIN list)	37205-87-1
6	4-Nonylphenyl-polyethylene glycol	9016-45-9
7	Polyoxyethylene nonylphenylether, branched (NPEs 3-18)	68412-54-4
8	Polyoxyethylene t-octylphenyl ether (OPEs 3-18)	9002-93-1
9	4-Nonylphenol, branched, ethoxylated	127087-87-0
10	4-Nonylphenol, ethoxylated	26027-38-3
11	Octylphenoethoxylate, branched	68987-90-6
12	Octylphenoethoxylate, branched	9036-19-5

Appendix 15: Nonylphenols (NP) - Octylphenols (OP)		CAS No.
1	Nonylphenol	104-40-5
2	Nonylphenol, branched	90481-04-2
3	Nonylphenol NP	Various
4	Octylphenol, branched	27193-28-8
5	Octylphenol OP	Various
6	4-Nonylphenol (various, branched and linear)	25154-52-3
7	4-Nonylphenol, branched	84852-15-3
8	4-Octylphenol (linear)	1806-26-4
9	4-(1,1,3,3-Tetramethylbutyl)-phenol; 4-(t-Octyl)phenol	140-66-9



Appendix 16: Organotin compounds		Short form
1	Dibutyltin	DBT
2	Dimethyltin	DMT
3	Diocetyl tin	DOT
4	Diphenyltin	DPhT
5	Dipropyltin	DPT
6	Monobutyltin	MBT
7	Monomethyltin	MMT
8	Monooctyltin	MOT
9	Monophenyltin	MPhT
10	Tetrabutyltin	TeBT
11	Tetraethyltin	TeET
12	Tetraoctyltin	TeOT
13	Tributyltin	TBT
14	Tributyltin oxide	TBTO
15	Tricyclohexyltin	TCyHT
16	Trimethyltin	TMT
17	Triocetyl tin	TOT
18	Triphenyltin	TPhT
19	Tripropyltin	TPT



Appendix 17-1: PFAS	Substance	Short form	CAS No.
PFOA	Perfluorooctanoic Acid	PFOA	335-67-1
Salts (examples)	Ammonium perfluorooctanoate	APFO	3825-26-1
	Sodium perfluorooctanoate		335-95-5
	Potassium perfluorooctanoate		2395-00-8
	Perfluorooctanoic acid, silver salt		335-93-3
	Ethanaminium, N,N,N-triethyl-, salt with perfluorooctanoic acid (1:1)		98241-25-9
PFOA related substances	8:2 Fluorotelomer alcohol	8:2 FTOH	678-39-7
	8:2 Fluorotelomer acrylate	8:2 FTAC	27905-45-9
	8:2 Fluorotelomer methacrylate	8:2 FTMAC	1996-88-9
	8:2 Fluorotelomer phosphate monoester	8:2 monoPAP	57678-03-2
	8:2 Fluorotelomer phosphate diester	8:2 diPAP	678-41-1
	Polyfluorinated silanes	C8-PFSi	various (i.e. 3102-79-2)
	Perfluorooctyl phosphonic acid	C8-PFPA	40143-78-0
	Polyfluorinated iodide	8:2 FTI	2043-53-0
	Perfluorooctyl iodide	PFOI	507-63-1
	Perfluorooctanoyl fluoride		335-66-0
	Methyl perfluorooctanoate		376-27-2
	Ethyl perfluorooctanoate		3108-24-5
	Perfluorooctane sulfonamide	PFOSA	754-91-6
	N-ethylperfluoro-1-octanesulfonamide	EtFOSA	4151-50-2
	N-methylperfluoro-1-octanesulfonamide	MeFOSA	31506-32-8
	2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol	EtFOSE	1691-99-2
	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol	N-MeFOSE	24448-09-7
	Perfluorooctanesulfonyl fluoride		307-35-7
<p>Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds are defined in POP Regulation (2019/1021) as the following: perfluorooctanoic acid, including any of its branched isomers, its salts and PFOA-related compounds which are any substances that degrade to PFOA, including any substances (including salts and polymers) having a linear or branched perfluoroheptyl group with the moiety (C₇F₁₅)-C as one of the structural elements.</p> <p>The following compounds are not included as PFOA-related compounds:</p> <p>C₈F₁₇-X, where X = F, Cl, Br;</p> <ul style="list-style-type: none"> fluoropolymers that are covered by CF₃[CF₂]_n-R', where R'=any group, n> 16; perfluoroalkyl carboxylic acids (including their salts, esters, halides and anhydrides) with ≥ 8 perfluorinated carbons; perfluoroalkane sulfonic acids and perfluoro phosphonic acids (including their salts, esters, halides and anhydrides) with ≥ 9 perfluorinated carbons 			

Appendix 17-2: PFAS	Substance	Short form	CAS No.
Long chain perfluoralkyl acids (C ₉ -C ₁₄)	Perfluorononanoic acid (PFNA)		375-95-1 / 21049-39-8 / 4149-60-4
	Perfluorodecanoic acid (PFDA)		335-76-2
	Perfluoroundecanoic acid (PFUdA)		2058-94-8
	Perfluorododecanoic acid (PFDoA)		307-55-1
	Perfluorotridecanoic acid (PFTrA)		72629-94-8
	Perfluorotetradecanoic acid (PFTA)		376-06-7
Long chain perfluoralkyl related substances (C ₉ -C ₁₄)	1H,1H,2H,2H-Perfluoro-1-Dodecanol (10:2 FTOH)		865-86-1
	2H,2H,3H,3H- Perfluoroundecanoic acid (H4PFUnA)		34598-33-9
	1H,1H,2H,2H- Perfluorododecylacrylate (10:2 FTA)		17741-60-5
	Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)		172155-07-6
	1H,1H,2H,2H-perfluoro-1-dodecanesulfonato (10:2 FTS)		108026-35-3
	1H,1H,2H,2H-Perfluorodecan-sulfonato (8:2 FTS)		39108-34-4
	Acido Perfluorodecansolfonico (PFDS)		335-77-3 / 2806-15-7 / 2806-16-8 / 67906-42-7
	Acido Perfluononansulfonico (PFNS)		35192-74-6 / 29359-39-5 / 17202-41-4
	Acido perfluorododecansolfonico (PFDoS)		
<p>C₉-C₁₄ linear and/or branched perfluorocarboxylic acids (C₉-C₁₄ PFCAs), their salts and C₉-C₁₄ PFCAs-related substances defined in REACH Regulation (1907/2006) Entry 68:</p> <ul style="list-style-type: none"> Linear and branched perfluorocarboxylic acids of the formula C_nF_{2n+1}-C(=O)OH where n = 8, 9, 10, 11, 12, or 13 (C₉-C₁₄ PFCAs), including their salts, and any combinations thereof; Any C₉-C₁₄ PFCA-related substance having a perfluoro group with the formula C_nF_{2n+1}- directly attached to another carbon atom, where n = 8, 9, 10, 11, 12, or 13, including their salts and any combinations thereof; Any C₉-C₁₄ PFCA-related substance having a perfluoro group with the formula C_nF_{2n+1}- that it is not directly attached to another carbon atom, where n = 9, 10, 11, 12, 13 or 14 as one of the structural elements, including their salts and any combinations thereof. <p>The following substances are excluded from this designation:</p> <ul style="list-style-type: none"> C_nF_{2n+1}-X, where X = F, Cl, or Br where n = 9, 10, 11, 12, 13 or 14, including any combinations thereof, C_nF_{2n+1}-C(=O)OX' where n > 13 and X'=any group, including salts. 			



Appendix 18: Phthalates		Short form	CAS No.
1	BenzylButylphthalate	BBP	85-68-7
2	Dibutylphthalate	DBP	84-74-2
3	Diisobutyl phthalate	DIBP	84-69-5
4	Di-iso-decylphthalate	DIDP	26761-40-0 68515-49-1
5	Di-iso-nonylphthalate	DINP	28553-12-0 68515-48-0
6	Di-pentylphthalate (n-, iso- or mixed)	DPP	131-18-0 605-50-5 776297-69-9 84777-06-0
7	Di-(2-ethylhexyl)phthalate	DEHP	117-81-7
8	Di-(2-methoxyethyl)phthalate	DMEP	117-82-8
9	Di-n-octylphthalate	DNOP	117-84-0
10	Di-n-hexylphthalate	DHP-DnHP	84-75-3
11	1,2-benzendicarboxylic acid, di C6-8 branched alkyl esters C7 rich	DIHP	71888-89-6
12	1,2-benzendicarboxylic acid, di C7-11 branched and linear alkyl esters C7 rich	DHNUP	68515-42-4

Appendix 19: Polychlorobiphenyls		CAS No.
1	2,4,4'-trichlorobiphenyl (PCB 28)	7012-37-5
2	2,2',5,5'-tetrachlorobiphenyl (PCB 52)	35693-99-3
3	3,3',4,4'-tetrachlorobiphenyl (PCB 77)	32598-13-3
4	3,4,4',5-tetrachlorobiphenyl (PCB 81)	70362-50-4
5	2,2',4,5,5'-pentachlorobiphenyl (PCB 101)	37680-73-2
6	2,3,3',4,4'-pentachlorobiphenyl (PCB 105)	32598-14-4
7	2,3,4,4',5-pentachlorobiphenyl (PCB 114)	74472-37-0
8	2,3',4,4',5-pentachlorobiphenyl (PCB 118)	31508-00-6
9	2',3,4,4',5-pentachlorobiphenyl (PCB 123)	65510-44-3
10	3,3',4,4',5-pentachlorobiphenyl (PCB 126)	57465-28-8
11	2,2',3,4,4',5'-hexachlorobiphenyl (PCB 138)	35065-28-2
12	2,2',4,4',5,5'-hexachlorobiphenyl (PCB 153)	35065-27-1
13	2,3,3',4,4',5-hexachlorobiphenyl (PCB 156)	38380-08-4
14	2,3,3',4,4',5'-hexachlorobiphenyl (PCB 157)	69782-90-7
15	2,3',4,4',5,5'-hexachlorobiphenyl (PCB 167)	52663-72-6
16	3,3',4,4',5,5'-hexachlorobiphenyl (PCB 169)	32774-16-6
17	2,2',3,4,4',5,5'-heptachlorobiphenyl (PCB 180)	35065-29-3
18	2,3,3',4,4',5,5'-heptachlorobiphenyl (PCB 189)	39635-31-9

Appendix 20: Polychloronaphthalenes		CAS No.
1	2-chloronaphthalene	91-58-7
2	1,2-dichloronaphthalene	20250-69-3
3	1,2,3-trichloronaphthalene	50402-52-3
4	1,2,3,4-tetrachloronaphthalene	20020-02-4
5	1,2,3,5,7-pentachloronaphthalene	53555-65-0
6	1,2,3,4,5,6-hexachloronaphthalene	58877-88-6
7	1,2,3,4,5,6,7-heptachloronaphthalene	58863-14-2
8	Octachloronaphthalene	2234-13-1



Appendix 21: Polycyclic Aromatic Hydrocarbons (IPA - PAH)		Short form	CAS No.
1	Acenaphthene		83-32-9
2	Acenaphthylene		208-96-8
3	Anthracene		120-12-7
4	Benzo[a]anthracene	BaA	56-55-3
5	Benzo[a]pyrene	BaP	50-32-8
6	Benzo[b]fluoranthene	BbFA	205-99-2
7	Benzo[e]pyrene	BeP	192-97-2
8	Benzo[ghi]perylene		191-24-2
9	Benzo[k]fluoranthene	BkFA	207-08-9
10	Benzo[j]fluoranthene	BjFA	205-82-3
11	Chrysene	CHR	218-01-9
12	Dibenzo[a,h]anthracene	DBA _h A	53-70-3
13	Fluoranthene		206-44-0
14	Fluorene		86-73-7
15	Indeno[1,2,3-cd]pyrene		193-39-5
16	Naphthalene		91-20-3
17	Phenanthrene		85-01-8
18	Pyrene		129-00-0

Appendix 22: Siloxanes		CAS No.
1	Octamethylcyclotetrasiloxane (D4)	556-67-2
2	Decamethylcyclopentasiloxane (D5)	541-02-6
3	Dodecamethylcyclohexasiloxane (D6)	540-97-6



Appendix 23: Solvents	Unit	Substance	CAS No.	Requirements	Test method reference
Chlorinated Solvents	mg/kg	α-Chlorotoluene	100-44-7	≤ 1	DIN 54232
	mg/kg	Methylene chloride	75-09-2	≤ 50 (sum)	GB 19340 "Extraction HS - SPME or Purge & Trap and Analysis by GC-MS"
	mg/kg	Trichloroethylene	79-01-6		
	mg/kg	1,2 Dichloroethane	107-06-2		
	mg/kg	1,1,2 Trichloroethane	79-00-5		
	mg/kg	Carbon Tetrachloride	56-23-5	≤ 1000	
	mg/kg	Chloroform	67-66-3	≤ 1000	
	mg/kg	Pentachloroethane	76-01-7	≤ 1000	
	mg/kg	Tetrachloroethylene	127-18-4	≤ 1000	
	mg/kg	1,1-Dichloroethylene	75-35-4	≤ 1000	
	mg/kg	1,1,1-Trichloroethane	71-55-6	≤ 1000	
	mg/kg	1,1,1,2-Tetrachloroethane	630-20-6	≤ 1000	
	mg/kg	1,1,2,2-Tetrachloroethane	79-34-5	≤ 1000	
Volatile Organic Compound (VOC)	mg/kg	Benzene	71-43-2	≤ 5	Solvent extraction and Analysis by GC-MS/LC-MS
	mg/kg	Methyl Alcohol	67-56-1	≤ 1000	
	mg/kg	N-exane	110-54-3	≤ 150	
	mg/kg	Toluylen diisocyanate (free)	26471-62-5	≤ 10	
	mg/kg	Toluene	108-88-3	≤ 200	
Other Solvents	mg/kg	N-Methyl-2-pyrrolidone (NMP)	872-50-4	≤ 1000	
	mg/kg	N,N-Dimethylacetamide (DMAc)	127-19-5	≤ 1000	
	mg/kg	2-Methoxyethanol	109-86-4	≤ 10	
	mg/kg	Dimethylformamide (DMF)	68-12-2	≤ 200	
	mg/kg	Acetophenone	98-86-2	≤ 50	
	mg/kg	2-phenylpropan-2-ol	617-94-7	≤ 50	
	mg/kg	Formamide	75-12-7	≤ 1000	

Appendix 24: UV-Stabilizers		Short form	CAS No.
1	2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol	UV 350	36437-37-3
2	2-(2H-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol	UV 328	25973-55-1
3	2,4-Di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol	UV 327	3864-99-1
4	2-Benzotriazol-2-yl-4,6-di-tert-butylphenol	UV 320	3846-71-7

