

# VAUDE Restricted Substance Lists (RSL)

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## 1. The VAUDE RSL

The VAUDE RSL defines individual requirements for substances in fabric, trims and accessories. The VAUDE RSL aligns with bluesign® RSL based on bluesign® BSSL.

### 1.1 Scope

The document specifies restrictions (limits and bans) for chemical substances in

- articles made of textiles and leather
- accessories for textile and leather articles

### 1.2 Usage Range

Usage Range classify consumer goods according to their consumer safety relevance. Three usage ranges (A, B, C) are defined with A being the most stringent category concerning limit values and bans:

- Usage Range A: Next to skin use and baby article (0-3 years)
- Usage Range B: Occasional skin contact
- Usage Range C: No skin contact

### 1.3 Testing methods

The testing methods listed in the last column of the table in chapter 2 are the recommended ones. The testing methods column consists of two entries: sample preparation, e.g. extraction, digestion, derivatisation and the test method, i.e. the actual measurement.

Depending on their availability international or national standards are also given for several substances and these methods may be applied. Other accredited methods can only be applied if it can be verified that equivalent results are obtained.

Details of the respective sample preparation methods can be found in the table below

## 2. Testing Methods

Sample preparation	Solvent(s)	Temperature (°C)	Time (min)	Other requirements
Extraction with KOH	Potassium hydroxide (1M)	90	12-15h	Derivatization with Acetic anhydride
Extraction with MeOH	Methanol	70	60	Ultrasonic bath
Extraction with THF	Tetrahydrofuran	40	60	
Extraction with DCM	Dichloromethane	40	60	Ultrasonic bath
Extraction with MTBE	Methyl tert-butyl ether	60	60	Ultrasonic bath
Extraction with water	Deionized water			
Extraction with MeOH/Acetonitrile	Methanol/Acetonitrile (1:1)	70	30	Ultrasonic bath
Extraction with Potassium carbonate solution	Potassium carbonate solution	Room temp.	60	Ultrasonic bath
Extraction with THF/Acetone	Tetrahydrofuran/Acetone	60	60	Ultrasonic bath, derivatization with Acetonitrile
Extraction with Acetone	Acetone	70	60	Ultrasonic bath
Extraction with Hexane/Dichloroethane	Hexane/Dichloroethane	70	60	
ASE - Accelerated Solvent Extraction	Acetone/Hexane (1:1)	100	-	
ASE - Accelerated Solvent Extraction	Ethyl acetate	40	-	
Soxhlet Extraction	Acetone/Hexane (1:1)	-	480	
Headspace	-	120	45	
DIN EN ISO 105-E04 (2013)	Acidic sweat solution	37	60	Textile to liquor ratio 1:50

For headspace measures a purge & trap gas chromatography is recommended

### 3. Restricted parameters and substances

Parameter	Limit	Test Method // Sample Preparation
pH-Value	Non-leather products: 4.0 - 7.5	ISO 3071 (2020)
	Leather products: 3.2 - 4.5	ISO 4045 (2018)
Odor	No unpleasant odor shall be emitted from the products	SNV 195 651
<b>Color Fastness Properties</b>		
Color fastness to perspiration	Textiles dyed with disperse or metal complex dyes: at least 3 - 4, the goal is > 4	ISO 105-E04 (2013)
Color fastness to saliva and perspiration	Fast (corresponds to level 5 of 5-step grey scale described in ISO 105-A02 (1993))	§64 LFGB BVL B 82.10-1 in combination with DIN 53160-1 and -2 (2010)

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Aldehydes</b>									
Formaldehyde	50-00-0	Leather	Usage ban	15	75	300	mg/kg	EN ISO 17226-2 (2019) with EN ISO 17226-1 (2021) confirmation method in case of interferences.	Test method: Alternatively, EN ISO 17226-1 (2021) can be used on its own.
		Textiles Metal parts Polymer parts Down/feather articles	Limitation	15	75	300	mg/kg	ISO 14184-1 (2011)	
<b>Alkylphenoethoxylates (APEOs)</b>									
<b><i>Nonylphenol ethoxylates (NPEO)</i></b>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		100		mg/kg	EN ISO 18254-1 (2016) with determination of APEO using LC/MS or LC/MS/MS	For sum of all allocated Members/Substances  (if traces above 10 ppm are detected the source of contamination has to be identified and phased out)
		Leather	Usage ban		100		mg/kg	Sample prep. and analysis using EN ISO 18218-1 (2015) with quantification according to EN ISO 18254-1 (2016)	
<b><i>Octylphenol ethoxylates (OPEO)</i></b>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		100		mg/kg	See NPEO	
		Leather	Usage ban		100		mg/kg	See NPEO	
<b>Alkylphenols (APs)</b>									
<b><i>Nonylphenol (NP), mixed isomers</i></b>	Several	Textiles Leather	Usage ban		10		mg/kg	EN ISO 21084 (2019)	For sum of all allocated Members/Substances
		Metal parts Polymer parts Down/feather articles	Usage ban		10		mg/kg	EN ISO 21084 (2019), modified // 1 g sample / 20 ml THF with Sonication for 60 min at 70°C	
<b><i>Octylphenol (OP), mixed isomers</i></b>	Several	Textiles Leather	Usage ban		10		mg/kg	EN ISO 21084 (2019)	For sum of all allocated Members/Substances
		Metal parts Polymer parts Down/feather articles	Usage ban		10		mg/kg	EN ISO 21084 (2019), modified // 1 g sample / 20 ml THF with Sonication for 60 min at 70°C	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Amines</b>									
Aniline - free content	62-53-3	Leather	Usage ban		30		mg/kg	EN ISO 17234-1 (2015)	In case aniline is detected the test needs to be repeated without addition of sodium dithionite.
		Textiles Polymer parts	Usage ban		30		mg/kg	EN ISO 14362-1 (2017)	
<b>Arylamines</b>									
<b>Arylamines (including corresponding salts)</b>	Several	Leather	Usage ban		20 each		mg/kg	EN ISO 17234-1 (2015) EN ISO 17234-2 (2011) // for azo colorants which may release 4-Aminoazobenzene	Single substances listed in Annex (as substance for example in PU, and as decomposition product of azo colorants which, by reductive cleavage of one or more azo groups, may release one or more of the aromatic amines)
		Textiles Metal parts Polymer parts Down/feather articles	Usage ban		20 each		mg/kg	EN ISO 14362-1 (2017) EN ISO 14362-3 (2017) // for azo colorants which may release 4-Aminoazobenzene	
<b>Biocides</b>									
Dimethylfumarate	624-49-7	All	Usage ban		0.1		mg/kg	ISO 16186 (2021)	
<b><i>o</i>-Phenylphenol and its salts</b>	Several	Leather	Limitation	50	100	200	mg/kg	DIN 50009 (2021)	
		Textiles	Limitation		50		mg/kg	DIN 50009 (2021)	
<b>Chlorinated Benzenes and Toluenes</b>									
<b>Chlorinated Benzenes and Toluenes</b>	Several	All	Usage ban		5.0		mg/kg	EN 17137 (2018)	For sum of all allocated chlorinated benzenes and toluenes // additional regulation for each allocated Member/Substance - Usage ban 1.0 mg/kg  Single substances listed in Annex



Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Chlorinated Phenols</b>									
<b>Chlorinated Phenols</b>	Several	All	Usage ban	See limits of substance groups below				DIN 50009 (2021)	Usage ban for every allocated Member/Substance
									Single substances listed in Annex
<i>Pentachlorophenol, its salts, esters and compounds</i>	Several	All	Usage ban	0.05	0.5	0.5	mg/kg		For sum of all allocated PCPs
<i>Tetrachlorophenol, its salts and compounds</i>	25167-83-3	All	Usage ban	0.05	0.5	0.5	mg/kg		For sum of all allocated TeCPs
<i>Trichlorophenol, all isomers</i>	25167-82-2	All	Usage ban	0.05	0.5	0.5	mg/kg		For sum of all allocated TriCPs
<b>Mono- and Dichlorophenols</b>	Several	All	Usage ban	1.0			mg/kg		For sum of all allocated Mono- and DiCPs
<b>Colorants</b>									
<b>Colorants banned for other reasons</b>	Several	All	Usage ban	20 each			mg/kg	DIN 54231 (2005)	Single substances listed in Annex
<b>Colorants with allergenic potential</b>	Several	All	Usage ban	20 each			mg/kg	DIN 54231 (2005)	
<b>Colorants with carcinogenic potential</b>	Several	All	Usage ban	20 each			mg/kg	DIN 54231 (2005)	
<b>Dioxins and Furans</b>									
<b>Dioxins and Furans - Group 1 and 2</b>	Several	All	Usage ban	5.0			µg/kg	EPA 8290A	For sum of all allocated Members/Substances to Group 1 and 2
									Single substances listed in Annex
<i>Dioxins and Furans - Group 1</i>	Several	All	Usage ban	1.0			µg/kg		For sum of all allocated Members/Substances to Group 1
								Single substances listed in Annex	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Dioxins and Furans (continued)</b>									
<i>Dioxins and Furans - Group 3</i>	Several	All	Usage ban		95		µg/kg	EPA 8290A	For sum of all allocated Members/Substances to Group 3 - official regulation for sum of all allocated Members/Substances to Group 1, 2 and 3 - 100 µg/kg  Single substances listed in Annex
<b><i>Dioxins and Furans - Group 4 and 5</i></b>	Several	All	Usage ban		5.0		µg/kg		For sum of all allocated Members/Substances to Group 4 and 5  Single substances listed in Annex
<i>Dioxins and Furans - Group 4</i>	Several	All	Usage ban		1.0		µg/kg		For sum of all allocated Members/Substances to Group 4  Single substances listed in Annex
<b>Fibers</b>									
<b><i>Asbestos</i></b>	Several	All	Usage ban	Not detected				REM/EDX BGI 505-46 U.S. EPA/600/R-93/116	Single substances listed in Annex
<b>Flame retardants</b>									
<b>Flame retardants</b>	Several	All	Usage ban		5.0 each		mg/kg	EN ISO 17881-1 (2016) for brominated flame retardants EN ISO 17881-2 (2016) for phosphorus flame retardants	Single substances listed in Annex
<b><i>Chlorinated Paraffins, all chain lengths</i></b>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		5.0 each		mg/kg	ISO 22818 (2021)	Single substances listed in Annex
		Leather	Usage ban		100 each		mg/kg	ISO 18219 (2021)	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Glycols</b>									
2-Ethoxyethanol	110-80-5	Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
		Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
2-Ethoxyethyl acetate	111-15-9	Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
		Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
2-Methoxy-1-propanol	1589-47-5	Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
		Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
2-Methoxyethanol	109-86-4	Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
		Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
2-Methoxyethyl acetate	110-49-6	Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
		Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Glycols (continued)</b>									
2-Methoxypropyl acetate	70657-70-4	Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
		Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
Bis(2-methoxyethyl) ether	111-96-6	Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
		Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
Ethylene glycol dimethyl ether	110-71-4	Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	
		Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
Triethylene glycol dimethyl ether	112-49-2	Plastic article	Usage ban	5.0			mg/kg	GC-MS // 2-Step extraction with THF and Methanol	
		Textiles Metal parts Rubber articles Down/feather articles Leather	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Halogenated Biphenyls, halogenated Terphenyls and halogenated Naphthalenes</b>									
<b>Polybrominated Biphenyls</b>	59536-65-1	All	Usage ban		5.0		mg/kg	EN ISO 17881-1 (2016) for brominated compounds ISO/TR 17881-3 (2018) for chlorinated compounds	For sum of all allocated Members/Substances
<b>Polybrominated Naphthalenes</b>	Several	All	Usage ban		1.0		mg/kg		For sum of all allocated Members/Substances
<b>Polybrominated Terphenyls</b>	Several	All	Usage ban		1.0		mg/kg		For sum of all allocated Members/Substances
<b>Polychlorinated Biphenyls</b>	1336-36-3	All	Usage ban		1.0		mg/kg		For sum of all allocated Members/Substances
<b>Polychlorinated Naphthalenes</b>	Several	All	Usage ban		1.0 each		mg/kg		Usage ban 1.0 mg/kg for every allocated Member/Substance
<b>Polychlorinated Terphenyls</b>	61788-33-8	All	Usage ban		1.0		mg/kg		For sum of all allocated Members/Substances
<b>Halogenated Diarylalkanes</b>									
<b>Halogenated Diarylalkanes</b>	Several	All	Usage ban		1.0 each		mg/kg	GC-MS // Extraction following DIN EN 62321-6 (2016)	Single substances listed in Annex
<b>Isocyanates</b>									
<b>Isocyanates</b>	Several	All	Limitation		1.0		mg/kg	EN 13130-8 (2004)	Free content applies to sum of all allocated isocyanates Single substances listed in Annex
<b>Metals</b>									
<b>Antimony, its salts and compounds</b>	Several	Leather	Limitation	5	10	10	mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	As extractable metal content // Usage as flame retardant: bluesign® CRITERIA for flame retardants have to be followed
		Textiles	Limitation	5	10	10	mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	
		Metal parts Polymer parts Down/feather articles	Limitation		60		mg/kg	DIN EN ISO 11885 (2009) EN 71-3 (2019) // Acidic solution migration simulating gastric juices DIN EN ISO 17294-2 (2017)	
		Fibers/yarn	Limitation		260		mg/kg	DIN EN 16711-1 (2016) // Total content	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Metals (continued)</b>									
<b>Arsenic, its salts and compounds</b>		Textiles Metal parts Polymer parts Down/feather articles	Usage ban		0.2		mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content
		Leather	Usage ban		0.2		mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	
<b>Cadmium, its salts and compounds</b>	Several	Textiles Polymer parts Down/feather articles	Usage ban		0.1		mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content
		Leather	Usage ban		0.1		mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	
		Textiles Polymer parts Down/feather articles Metal parts	Usage ban		40		mg/kg	DIN EN 16711-1 (2016) // Total content	As total metal content
		Leather	Usage ban		40		mg/kg	EN ISO 17072-2 (2019) // Total content	
<b>Chromium VI, its salts and compounds</b>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		0.5		mg/kg	EN ISO 17075-1 (2017)	As extractable metal content
		Metal parts	Usage ban		0.5		mg/kg	EN 62321-7-1 (2016)	
		Leather	Usage ban		3.0		mg/kg	EN ISO 17075-1 (2017) EN ISO 17075-2 (2017) DIN EN ISO 4044 (2017)	



Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Metals (continued)</b>									
<b>Chromium, its salts and compounds</b>	Several	Metal parts Polymer parts Down/feather articles	Limitation	60			mg/kg	DIN EN ISO 11885 (2009) EN 71-3 (2019) // Acidic solution migration simulating gastric juices DIN EN ISO 17294-2 (2017)	If products are covered with a metal layer, including a chromium layer, coating must be constantly in good condition // as extractable metal content
		Textiles	Limitation	0.5			mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content // for textiles dyed with chromium containing metal complex dyes A: 1.0 // B: 2.0 // C: 2.0 mg/kg
<b>Cobalt, its salts and compounds</b>	Several	Leather	Limitation	1.0			mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	As extractable metal content // for textiles and leather dyed with cobalt containing metal complex dyes A: 1.0 // B: 4.0 // C: 4.0 mg/kg
		Textiles	Limitation	1.0			mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	
		Metal parts Polymer parts Down/feather articles	Limitation	1.0	4.0	4.0	mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content
<b>Copper, its salts and compounds</b>	Several	Textiles	Limitation	25	50	50	mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content
		Leather	Limitation	25	50	50	mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Metals (continued)</b>									
<b>Lead, its salts and compounds</b>	Several	Metal parts	Usage ban	90			mg/kg	DIN EN 16711-1 (2016) // Total content	As total metal content
		Leather	Usage ban	40			mg/kg	EN ISO 17072-2 (2019) // Total content	
		Textiles Polymer parts Down/feather articles	Usage ban	40			mg/kg	DIN EN 16711-1 (2016) // Total content	
		Leather	Usage ban	0.2	1.0	1.0	mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	As extractable metal content
		Textiles Polymer parts Down/feather articles	Usage ban	0.2	1.0	1.0	mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	
<b>Mercury, its salts and compounds</b>	Several	Metal parts	Usage ban	60			mg/kg	EN 71-3 (2019) // Acidic solution migration simulating gastric juices EN ISO 12846 (2012)	As extractable metal content
		Leather	Usage ban	0.02			mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	
		Textiles Polymer parts Down/feather articles	Usage ban	0.02			mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	
<b>Nickel, its salts and compounds</b>	Several	Textiles	Limitation	1.0			mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content // for textiles dyed with nickel containing metal complex dyes A: 1.0 // B: 4.0 // C: 4.0 mg/kg
		Leather	Limitation	1.0			mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	As extractable metal content // for leather dyed with nickel containing metal complex dyes A: 1.0 // B: 4.0 // C: 4.0 mg/kg
		Metal parts Polymer parts	Usage ban for A and B	0.5	0.5	-	µg/cm <sup>2</sup> /week	EN 1811 (2011) + A1 (2015) // Release EN 12472 (2020)	As released metal content



Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Monomers</b>									
Acrylamide	79-06-1	All	Usage ban	1.0			mg/kg	CEN/TS 13130-10 (2005)	
<b>Other Chemical Substances</b>									
2-Phenyl-2-propanol	617-94-7	All	Limitation	10	50	50	mg/kg	GC-MS // Extraction with Methanol	
Acetophenone	98-86-2	All	Limitation	20			mg/kg	GC-MS // Extraction with Methanol	
Azodicarbonamide (ADCA)	123-77-3	All	Limitation	100	200	200	mg/kg	Solvent Extraction // GC-MS or LC-MS or LC-DAD	
Benzyl chloride	100-44-7	All	Usage ban	1.0			mg/kg	GC-MS // Extraction with Dichloromethane	
Bisphenol A	80-05-7	All	Usage ban	1.0	10	10	mg/kg	EN ISO 18857-2 (2012) // Extraction with Methanol EN ISO 18857-2 (2012) // Extraction with THF	
<b>Cresol, all isomers</b>	1319-77-3	All	Usage ban	See isomers					
m-Cresol	108-39-4	All	Usage ban	10			mg/kg	BVL B 82.02-8 (2001) // Extraction with KOH	10 mg/kg for each isomer
o-Cresol	95-48-7	All	Usage ban	10			mg/kg	DIN EN ISO 17070 (2015) // Extraction with KOH	
p-Cresol	106-44-5	All	Usage ban	10			mg/kg		
Formamide	75-12-7	Textiles	Usage ban	50	50	100	mg/kg	EN 17131 (2019)	
		Metal parts Polymer parts Down/feather articles Leather	Usage ban	50	50	100	mg/kg	CEN ISO/TS 16189 (2013)	
Isoquinoline	119-65-3	All	Usage ban	50			mg/kg	LC-MS/MS // Extraction with Methanol LC-DAD // Extraction with THF LC-DAD // Extraction with Methanol LC-MS/MS // Extraction with THF	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Other Chemical Substances (continued)</b>									
Phenol	108-95-2	All	Limitation	10	50	100	mg/kg	LC-MS // Extraction with Methanol GC-MS // Extraction with Methanol	
Quinoline	91-22-5	All	Usage ban		50		mg/kg	LC-MS/MS // Extraction with Methanol LC-DAD // Extraction with THF or Methanol LC-MS/MS // Extraction with THF	
<b>Siloxanes</b>	Several	All	Usage ban						
Octamethyl cyclotetrasiloxane (D4)	556-67-2	All	Usage ban		30		mg/kg	GC // with reference to TEGEWA method	Usage ban for every allocated member/substances
Decamethyl cyclopentasiloxane (D5)	541-02-6	All	Usage ban		50		mg/kg		
Dodecamethyl cyclohexasiloxane (D6)	540-97-6	All	Usage ban		50		mg/kg		
<b>Ozone Depleting Substances</b>									
<b>Ozone depleting substances (CFCs) class I</b>	Several	All	Usage ban		0.1 each		mg/kg	GC-MS // Headspace	Usage ban for direct use in manufacturing of articles
<b>Ozone depleting substances (CFCs) class II</b>	Several	All	Usage ban		0.1 each		mg/kg	GC-MS // Headspace	See Regulation (EC) No 1005/2009 for a complete list of single substances
<b>Pesticides</b>									
<b>Pesticides</b>	Several	All	Limitation		0.5		mg/kg	GC-MS // ASE with Acetone/Hexane LC-MS // ASE with Acetone/Hexane GC-MS // Soxhlet Extraction with Acetone/Hexane LC-MS // Soxhlet Extraction with Acetone/Hexane	Applies to total sum of all allocated members/substances  Single substances listed in Annex

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
<b>Perfluoroalkyl sulfonic acids and derivatives – PFSA</b>									
General usage ban for all PFSA/PFCA chemicals.									
Exceptions only possible for articles, based on C6 chemistry, that are intended for essential use as defined in coming EU regulation (see also Chapter 3.3)									
<b>Perfluorooctane sulfonic acid and its derivatives</b>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		1.0		µg/m <sup>2</sup>	CEN/TS 15968 (2014)	Single substances listed in Annex
		Leather	Usage ban		1.0		µg/m <sup>2</sup>	EN ISO 23702-1 (2018)	
<b>Perfluoroalkyl carboxylic acids and derivatives – PFCA</b>									
General usage ban for all PFSA/PFCA chemicals.									
Exceptions only possible for articles, based on C6 chemistry, that are intended for essential use as defined in coming EU regulation (see also Chapter 3.3)									
<b>Perfluorocarboxylic acids and its salts</b>	Several	Leather	Usage ban		0.1		mg/kg	EN ISO 23702-1 (2018)	For sum of all allocated Members/Substances
		Textiles Metal parts Polymer parts Down/feather articles	Usage ban		0.1		mg/kg	CEN/TS 15968 (2014)	
<i>Perfluorohexanoic acid and its salts</i>	Several	Leather	Usage ban		0.05		mg/kg	EN ISO 23702-1 (2018)	Single substances listed in Annex.
		Textiles Metal parts Polymer parts Down/feather articles	Usage ban		0.05		mg/kg	CEN/TS 15968 (2014)	
<i>Perfluorooctanoic acid and its salts</i>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		25		µg/kg	CEN/TS 15968 (2010)	Single substances listed in Annex
		Leather	Usage ban		25		µg/kg	EN ISO 23702-1 (2018)	
<b>Perfluorooctanoic acid related substances</b>	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		1000		µg/kg	CEN/TS 15968 (2014)	For the sum of PFOA-related substances.
		Leather	Usage ban		1000		µg/kg	EN ISO 23702-1 (2018)	Single substances listed in Annex

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Plasticizers</b>									
<b>Phthalic acid esters</b>	Several	Textiles	Usage ban	50 each			mg/kg	EN ISO 14389 (2014) CPSC-CH-C1001-09.4	Single substances listed in Annex
		Metal parts Polymer parts Down/feather articles Leather	Usage ban	50 each			mg/kg	CPSC-CH-C1001-09.4	
<b>Polyaromatic hydrocarbons (PAHs)</b>									
<b>Polyaromatic hydrocarbons (PAHs)</b>	Several	All	Usage ban	10			mg/kg	AfPS GS 2019	For sum of all allocated PAHs PAHs without substance specific limit are listed in Annex
Benzo(a)anthracene	56-55-3	All	Usage ban	0.5	1.0	1.0	mg/kg		
Benzo(a)pyrene	50-32-8	All	Usage ban	0.2			mg/kg		
Benzo(b)fluoranthene	205-99-2	All	Usage ban	0.5	1.0	1.0	mg/kg		
Benzo(e)pyrene	192-97-2	All	Usage ban	0.5	1.0	1.0	mg/kg		
Benzo(j)fluoranthene	205-82-3	All	Usage ban	0.5	1.0	1.0	mg/kg		
Benzo(k)fluoranthene	207-08-9	All	Usage ban	0.5	1.0	1.0	mg/kg		
Chrysene	218-01-9	All	Usage ban	0.5	1.0	1.0	mg/kg		
Dibenzo(a,h)anthrene	53-70-3	All	Usage ban	0.5	1.0	1.0	mg/kg		
<b>Polymers</b>									
Polyvinyl chloride	9002-86-2	All	Usage ban	See comment				FTIR Beilstein test // FTIR measurement only if result of Beilstein test was positive	Usage ban for usage range A and B - Not detected // for usage range C: for special applications. BLUESIGN has the right to make an individual decision
<b>Solvents</b>									
1,2-Dichloroethane	107-06-2	All	Usage ban	1.0			mg/kg	GC-MS // Headspace	
Benzene	71-43-2	All	Usage ban	5.0			mg/kg	VDA 278 (2011)	
Dichloromethane	75-09-2	All	Usage ban	5.0			mg/kg	GC-MS // Headspace	Usage ban for direct use in manufacturing of articles

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method / / Sample Preparation	Comment
<b>Solvents (continued)</b>									
N,N-Dimethylacetamide (DMAc)	127-19-5	Textiles	Usage ban	5.0			mg/kg	EN 17131 (2019)	<p>Exceptions: Articles produced by solvent coating, lamination or fiber manufacturing - A/B/C 50 mg/kg.</p> <p>As residual fiber solvent in elastane and PAN fibers with Monitoring status - A: 10 mg/kg, B/C: 50 mg/kg.</p> <p>Aramid fibers: For special applications bluesign technologies has the right to make an individual decision.</p>
		Leather	Usage ban	5.0			mg/kg	EN ISO 19070 (2016)	
		Metal parts Polymer parts Down/feather articles	Usage ban	5.0			mg/kg	CEN ISO/TS 16189 (2013)	
N,N-Dimethylformamide (DMF)	68-12-2	Textiles	Usage ban	5.0			mg/kg	EN 17131 (2019)	<p>Exceptions: Specific limits are defined for articles produced by solvent coating, lamination or fiber manufacturing - A/B/C 50 mg/kg.</p> <p>Exception is valid for PAN fibers.</p>
		Metal parts Polymer parts Down/feather articles	Usage ban	5.0			mg/kg	CEN ISO/TS 16189 (2013)	
		Leather	Usage ban	5.0			mg/kg	EN ISO 19070 (2016)	
N-Ethyl-2-pyrrolidone (NEP)	2687-91-4	Leather	Usage ban	10	10	100	mg/kg	EN ISO 19070 (2016)	
		Metal parts Polymer parts Down/feather articles	Usage ban	10	10	100	mg/kg	CEN ISO/TS 16189 (2013)	
		Textiles	Usage ban	10	10	100	mg/kg	EN 17131 (2019)	
N-Methylpyrrolidone (NMP)	872-50-4	Textiles	Usage ban	10	10	100	mg/kg	EN 17131 (2019)	<p>Exception is valid for Aramid fibers: for special applications BLUESIGN has the right to make an individual decision</p>
		Metal parts Polymer parts Down/feather articles	Usage ban	10	10	100	mg/kg	CEN ISO/TS 16189 (2013)	
		Leather	Usage ban	10	10	100	mg/kg	EN ISO 19070 (2016)	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Solvents (continued)</b>									
Tetrachloroethylene	127-18-4	All	Usage ban	1.0			mg/kg	GC-MS // Headspace	
Toluene	108-88-3	All	Usage ban	10	50	50	mg/kg	GC-MS // Headspace	Usage ban not valid for solvent coating, laminating and painting/lacquering.
Trichloroethylene	79-01-6	All	Usage ban	5.0			mg/kg	GC-MS // Headspace	
<b>Xylene, all isomers</b>	1330-20-7	All	Usage ban	50	100	100	mg/kg	GC-MS // Headspace	Sum of all isomers. Usage ban not valid for solvent coating, laminating and painting/lacquering.
<b>Tin-organic Compounds</b>									
<b>Tin-organic Compounds - as mono-, di- and tri-, tetraalkyltin organics</b>	Several	All	Usage ban					CEN ISO/TS 16179 (2012)	Usage ban for all allocated Members/Substances
<b>Ethyltin compounds</b>	Several		Usage ban						
<i>Tetraethyltin compounds (TET)</i>	Several	All	Usage ban	1.0			mg/kg		
<b>Hexyltin compounds</b>	Several		Usage ban						
<i>Tricyclohexyltin compounds (TCyHT)</i>	Several	All	Usage ban	0.5			mg/kg		
<b>Butyltin compounds</b>	Several		Usage ban						
<i>Dibutyltin compounds (DBT)</i>	Several	All	Usage ban	1.0			mg/kg		
<i>Monobutyltin compounds (MBT)</i>	Several	All	Usage ban	1.0			mg/kg		
<i>Tetrabutyltin compounds (TeBT)</i>	Several	All	Usage ban	0.5			mg/kg		
<i>Tributyltin compounds (TBT)</i>	Several	All	Usage ban	0.5			mg/kg		
<b>Methyltin compounds</b>	Several		Usage ban						
<i>Dimethyltin compounds (DMT)</i>	Several	All	Usage ban	0.5			mg/kg		



Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>Tin-organic Compounds (continued)</b>									
<i>Monomethyltin compounds (MMT)</i>	Several	All	Usage ban	2.0			mg/kg	CEN ISO/TS 16179 (2012)	Usage ban for all allocated Members/Substances
<i>Trimethyltin compounds (TMT)</i>	Several	All	Usage ban	0.5			mg/kg		
<b>Octyltin compounds</b>	Several		Usage ban						
<i>Diocyltin compounds (DOT)</i>	Several	All	Usage ban	1.0			mg/kg		
<i>Monooctyltin compounds (MOT)</i>	Several	All	Usage ban	2.0			mg/kg		
<i>Tetraoctyltin compounds (TeOT)</i>	Several	All	Usage ban	0.5			mg/kg		
<i>Triocyltin compounds (TOT)</i>	Several	All	Usage ban	0.5			mg/kg		
<b>Phenyltin compounds</b>	Several		Usage ban						
<i>Diphenyltin compounds (DPhT)</i>	Several	All	Usage ban	2.0			mg/kg		
<i>Monophenyltin compounds (MPhT)</i>	Several	All	Usage ban	1.0			mg/kg		
<i>Triphenyltin compounds (TPhT)</i>	Several	All	Usage ban	0.5			mg/kg		
<b>Propyltin compounds</b>	Several		Usage ban						
<i>Dipropyltin compounds (DPT)</i>	Several	All	Usage ban	1.0			mg/kg		
<i>Tripropyltin compounds (TPT)</i>	Several	All	Usage ban	0.5			mg/kg		
<b>UV stabilizers</b>									
2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol	36437-37-3	All	Usage ban	1000			mg/kg	DIN EN 62321-6 (2016) // Extraction with THF	
2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)phenol	25973-55-1	All	Usage ban	1000			mg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method // Sample Preparation	Comment
<b>UV stabilizers (continued)</b>									
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)-phenol	3864-99-1	All	Usage ban		1000		mg/kg	DIN EN 62321-6 (2016) // Extraction with THF	
2-benzotriazol-2-yl-4,6-di-tert-butylphenol	3846-71-7	All	Usage ban		1000		mg/kg		



## 4. Appendices

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Arylamines</b>		<b>Xylidines and its salts - with the exception of those specified elsewhere</b>	Several
<i>2,4-Diaminoanisole and its salts</i>	Several		
2,4-Diaminoanisole	615-05-4	<i>2,4-Xylidine and its salts</i>	Several
2,4-Diaminoanisole sulphate	39156-41-7	2,4-Xylidine	95-68-1
<i>2,4-Diaminotoluene and its salts</i>	Several	<i>2,6-Xylidine and its salts</i>	Several
2,4-Diaminotoluene	95-80-7	2,6-Xylidine	87-62-7
<i>2-Naphthylamine and its salts</i>	Several	<b>Nitrotoluidines and its salts</b>	Several
2-Naphthylamine	91-59-8		
2-Naphthylammoniumacetate	553-00-4	<i>2-Amino-4-nitrotoluene and its salts</i>	Several
<i>4,4'-Diaminodiphenylmethane and its salts</i>	Several	2-Amino-4-nitrotoluene	99-55-8
4,4'-Diaminodiphenylmethane	101-77-9	<b>Anisidines and its salts</b>	Several
<i>4,4'-Methylenebis-(2-chloraniline) and its salts</i>	Several	Anisidine (o-, p-isomers)	29191-52-4
4,4'-Methylenebis-(2-chloraniline)	101-14-4	<i>2-Anisidine and its salts</i>	Several
<i>4-Amino-3-fluorophenol and its salts</i>	Several	2-Anisidine	90-04-0
4-Amino-3-fluorophenol	399-95-1	<b>Benzidines and its salts</b>	Several
<i>4-Aminobiphenyl and its salts</i>	Several		
4-Aminobiphenyl	92-67-1	<i>3,3'-Dichlorobenzidine and its salts - with the exception of those specified elsewhere</i>	Several
<i>4-Chloroaniline and its salts</i>	Several		
4-Chloroaniline	106-47-8	3,3'-Dichlorobenzidine	91-94-1
<i>6-Amino-2-ethoxynaphthalene and its salts</i>	Several	<i>o-Dianisidines and its salts - with the exception of those specified elsewhere</i>	Several
6-Amino-2-ethoxynaphthalene	293733-21-8		
<i>o-Aminoazotoluene and its salts</i>	Several	3,3'-Dimethoxybenzidine	119-90-4
o-Aminoazotoluene	97-56-3	<i>3,3'-Dimethylbenzidine and its salts</i>	Several
<i>p-Aminoazobenzene and its salts</i>	Several	3,3'-Dimethylbenzidine	119-93-7
p-Aminoazobenzene	60-09-3	<b>Benzidine and its salts</b>	Several
<b>Trimethylanilines and its salts</b>	Several	Benzidine	92-87-5
		Benzidine acetate	36341-27-2
<i>2,4,5-Trimethylaniline and its salts</i>	Several	Benzidine dihydrochloride	531-85-1
2,4,5-Trimethylaniline	137-17-7	Benzidine, sulfate	21136-70-9
2,4,5-Trimethylaniline hydrochloride	21436-97-5	Benzidine, sulfate (1:1)	531-86-2

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Arylamines (continued)</b>		<i>Tetrachlorobenzenes, all isomers</i>	Several
<b>Toluidines and its salts</b>	Several	1,2,3,4-Tetrachlorobenzene	634-66-2
		1,2,3,5-Tetrachlorobenzene	634-90-2
<i>4,4'-Methylenedi-o-toluidine and its salts</i>	Several	1,2,4,5-Tetrachlorobenzene	95-94-3
4,4'-Methylenedi-o-toluidine	838-88-0	<i>Trichlorobenzenes, all isomers</i>	Several
<i>m-Toluidine and its salts</i>	Several	1,2,3-Trichlorobenzene	87-61-6
m-Toluidine	108-44-1	1,2,4-Trichlorobenzene	120-82-1
<i>o-Toluidine and its salts</i>	Several	1,3,5-Trichlorobenzene	108-70-3
o-Toluidine	95-53-4	<i>Dichlorobenzenes, all isomers</i>	Several
<i>p-Cresidine and its salts</i>	Several	1,2-Dichlorobenzene	95-50-1
p-Cresidine	120-71-8	1,3-Dichlorobenzene	541-73-1
<i>p-Toluidine and its salts</i>	Several	1,4-Dichlorobenzene	106-46-7
p-Toluidine	106-49-0	<b>Chlorinated Toluenes</b>	Several
<b>Dianilines and its salts</b>	Several	Chlorotoluene, unspecified mixture	25168-05-2
<i>4,4'-Oxydianiline and its salts</i>	Several	Pentachlorotoluene	877-11-2
4,4'-Oxydianiline	101-80-4	<i>Trichlorotoluenes, all isomers</i>	Several
<i>4,4'-Thiodianiline and its salts</i>	Several	2,3,4-Trichlorotoluene	7359-72-0
4,4'-Thiodianiline	139-65-1	2,3,6-Trichlorotoluene	2077-46-5
<b>Chlorotoluidines and its salts</b>	Several	2,4,5-Trichlorotoluene	6639-30-1
<i>4-Chloro-2-toluidine and its salts</i>	Several	2,4,6-Trichlorotoluene	23749-65-7
4-Chloro-2-toluidine	95-69-2	3,4,5-Trichlorotoluene	21472-86-6
4-chloro-2-toluidine hydrochloride	3165-93-3	a,a,a-Trichlorotoluene	98-07-7
<b>Biocides</b>		<i>Dichlorotoluenes, all isomers</i>	Several
o-Phenylphenol	90-43-7	2,3-Dichlorotoluene	32768-54-0
<b>Chlorinated Benzenes and Toluenes</b>		2,4-Dichlorotoluene	95-73-8
<b>Chlorinated Benzenes</b>	Several	2,5-Dichlorotoluene	19398-61-9
Hexachlorobenzene	118-74-1	2,6-Dichlorotoluene	118-69-4
Hexachlorobenzene	118-74-1	3,4-Dichlorotoluene	95-75-0
Monochlorobenzene	108-90-7	3,5-Dichlorotoluene	25186-47-4
Pentachlorobenzene	608-93-5	<i>Monochlorotoluenes, all isomers</i>	Several

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Chlorinated Benzenes and Toluenes (continued)</b>		3,4-Dichlorophenol	95-77-2
2-Chlorotoluene	95-49-8	3,5-Dichlorophenol	591-35-5
3-Chlorotoluene	108-41-8	<i>Monochlorophenols, all isomers</i>	25167-80-0
4-Chlorotoluene	106-43-4	2-Chlorophenol	95-57-8
<i>Tetrachlorotoluenes, all isomers</i>	Several	3-Chlorophenol	108-43-0
2,3,4,5-Tetrachlorotoluene	1006-32-2	4-Chlorophenol	106-48-9
2,3,4,6-Tetrachlorotoluene	875-40-1	<b>Colorants</b>	
2,3,5,6-Tetrachlorotoluene	1006-31-1	<b>Colorants banned for other reasons</b>	
a,a,a,2-Tetrachlorotoluene	2136-89-2	Acid Orange 24	1320-07-6
a,a,a,4-Tetrachlorotoluene	5216-25-1	Acid Violet 49	1694-09-3
<b>Chlorinated Phenols</b>		Basic Blue 26 - with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	2580-56-5
<i>Tetrachlorophenol, its salts and compounds</i>	25167-83-3	Direct Black 91	6739-62-4
2,3,4,5-Tetrachlorophenol	4901-51-3	Direct Blue 218	28407-37-6
2,3,4,6-Tetrachlorophenol	58-90-2	Direct Blue 76	16143-79-6
2,3,5,6-Tetrachlorophenol	935-95-5	Direct Yellow 1	6472-91-9
<i>Trichlorophenol, all isomers</i>	25167-82-2	Disperse Orange 149	85136-74-9
2,3,4-Trichlorophenol	15950-66-0	Disperse Yellow 23	6250-23-3
2,3,5-Trichlorophenol	933-78-8	<i>Navy Blue: A mixture of: disodium (6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)(1-(5-chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-); trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)chromat</i>	Several
2,3,6-Trichlorophenol	933-75-5		
2,4,5-Trichlorophenol	95-95-4		
2,4,6-Trichlorophenol	88-06-2		
3,4,5-Trichlorophenol	609-19-8	Disodium (6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)(1-(5-chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-)	118685-33-9
<i>Pentachlorophenol, its salts, esters and compounds</i>	Several	Trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)chromat	
Pentachlorophenol	87-86-5		
<b>Mono- and Dichlorophenols</b>		Basic Violet 1	8004-87-3
<i>Dichlorophenols, all isomers</i>	Several		
2,3-Dichlorophenol	576-24-9	Basic Violet 3 - with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	548-62-9
2,4-Dichlorophenol	120-83-2		
2,5-Dichlorophenol	583-78-8		
2,6-Dichlorophenol	87-65-0		

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Colorants (continued)</b>		Disperse Orange 37/59/76 [3]	51811-42-8
Basic Violet 3 [1]	548-62-9	<b>Colorants with carcinogenic potential</b>	Several
Basic Violet 3 [2]	603-48-5	Acid Red 26	3761-53-3
Basic Violet 3 [3]	14426-25-6	Basic Red 9	569-61-9
Solvent Blue 4	6786-83-0	Basic Violet 14	632-99-5
<b>Colorants with allergenic potential</b>	Several	Direct Black 38	1937-37-7
Disperse Blue 102	12222-97-8	Direct Blue 6	2602-46-2
Disperse Blue 106	12223-01-7	Direct Brown 95	16071-86-6
Disperse Blue 124	61951-51-7	Direct Red 28	573-58-0
Disperse Blue 26	3860-63-7	Disperse Blue 1	2475-45-8
Disperse Blue 3	2475-46-9	Disperse Orange 11	82-28-0
Disperse Blue 7	3179-90-6	Disperse Yellow 3	2832-40-8
Disperse Brown 1	23355-64-8	Pigment Red 104	12656-85-8
Disperse Orange 1	2581-69-3	Pigment Yellow 34	1344-37-2
Disperse Orange 3	730-40-5	Solvent Red 80	6358-53-8
Disperse Red 1	2872-52-8	Solvent Yellow 2	60-11-7
Disperse Red 11	2872-48-2	Solvent Violet 8 - with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	561-41-1
Disperse Red 17	3179-89-3	<b>Basic Green 4</b>	Several
Disperse Yellow 1	119-15-3	Leucomalachite green	129-73-7
Disperse Yellow 39	12236-29-2	Malachite green	10309-95-2
Disperse Yellow 49	54824-37-2	Malachite green chloride	569-64-2
Disperse Yellow 9	6373-73-5	Malachite green oxalate	2437-29-8
Solvent Yellow 14	842-07-9	<b>Dioxins and Furans</b>	
<b>Disperse Blue 35</b>	Several	<b>Dioxins and Furans - Group 3</b>	Several
Disperse Blue 35 [1]	12222-75-2	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0
Disperse Blue 35 [2]	56524-77-7	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9
Disperse Blue 35 B	56524-76-6	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4
<b>Disperse Orange 37/59/76</b>	Several	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9
Disperse Orange 37/59/76 [1]	12223-33-5	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7
Disperse Orange 37/59/76 [2]	13301-61-6		



Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Dioxins and Furans (continued), Group 4 and 5</b>		Anthophyllite	77536-67-5
<i>Dioxins and Furans - Group 5</i>	Several	Chrysotile	12001-29-5 132207-32-0
1,2,3,4,7,8-Hexabromodibenzo-p-dioxin	110999-44-5	Crocidolite	12001-28-4
1,2,3,6,7,8-Hexabromodibenzo-p-dioxin	110999-45-6	Tremolite	77536-68-6
1,2,3,7,8,9-Hexabromodibenzo-p-dioxin	110999-46-7	<b>Flame retardants</b>	
1,2,3,7,8-Pentabromodibenzofuran	107555-93-1	<b>Brominated alkyl alcohols</b>	
<i>Dioxins and Furans - Group 4</i>	Several	2,2-Bis(bromomethyl)-1,3-propanediol	Several 3296-90-0
1,2,3,7,8-Pentabromodibenzo-p-dioxin	109333-34-8	1-Propanol, 2,2-dimethyl-, tribromo derivatives	36483-57-5 1522-92-5
2,3,4,7,8-Pentabromodibenzofuran	131166-92-2		
2,3,7,8-Tetrabromodibenzofuran	67733-57-7	2,3-Dibromopropan-1-ol-(2,3-DBPA)	96-13-9
2,3,7,8-Tetrabromodibenzo-p-dioxin	50585-41-6	Bis(2,3-dibromopropyl) phosphate	5412-25-9
<b>Dioxins and Furans - Group 1 and 2</b>	Several	Tetrabromobisphenol A	79-94-7
<i>Dioxins and Furans - Group 2</i>	Several	Tetrabromobisphenol A bis(2,3-dibromopropylether)	21850-44-2
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	Tri(aziridin-1-yl) phosphine oxide	545-55-1
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	Trimethyl phosphate	512-56-1
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	Tri-o-cresyl phosphate	78-30-8
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	Tris(2,3-dibromopropyl) phosphate	126-72-7
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	Tris-(2-chloro-1-methylethyl) phosphate	13674-84-5
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	Tris(2-chloroethyl) phosphate	115-96-8
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	Tris(methylphenyl) phosphate	1330-78-5
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	Tris-[2-chloro-1-(chloromethyl)ethyl] phosphate	13674-87-8
<i>Dioxins and Furans - Group 1</i>	Several	Trixylyl phosphate	25155-23-1
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	<b>Hexabromocyclododecan, all isomers - group for all major diastereoisomers identified</b>	
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	$\mu$ -Hexabromocyclododecane	134237-52-8
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1,2,5,6,9,10-Hexabromocyclododecane	3194-55-6
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	Hexabromocyclododecane	25637-99-4
<b>Fibers</b>		$\alpha$ -Hexabromocyclododecane	134237-50-6
<b>Asbestos</b>	Several	$\beta$ -Hexabromocyclododecane	134237-51-7
Actinolite	77536-66-4		
Amosite	12172-73-5		

Chemical Name	CAS Number
<b>Flame retardants (continued)</b>	
<b><i>Chlorinated Paraffins, all chain lengths</i></b>	Several
<i>Paraffin wax, chlorinated</i>	63449-39-8
<i>Paraffin, C10-C13, chlorinated</i>	85535-84-8
<i>Paraffin, C14-C17, chlorinated</i>	85535-85-9
<i>Paraffin, C18-C28, chlorinated</i>	85535-86-0
<b><i>Polybrominated diphenyl ethers</i></b>	Several
<i>Decabromodiphenyl ether</i>	1163-19-5
<i>Tetrabromodiphenyl ether</i>	40088-47-9
<i>Pentabromodiphenyl ether</i>	32534-81-9
<i>Octabromodiphenyl ether</i>	32536-52-0
<i>Nonabromodiphenyl ether</i>	63936-56-1
<i>Hexabromodiphenyl ether</i>	36483-60-0
<i>Heptabromodiphenyl ether</i>	68928-80-3
<i>Monobromodiphenyl ether</i>	Several
<i>2-Bromodiphenyl ether</i>	7025-06-1
<i>3-Bromodiphenyl ether</i>	6876-00-2
<i>4-Bromodiphenyl ether</i>	101-55-3
<b><i>Polybrominated diphenyl ethanes</i></b>	Several
<i>Decabromodiphenylethane</i>	84852-53-9

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Halogenated Diarylalkanes</b>		<b>Pesticides</b>	
<b>Monomethyl-dibromo-diphenyl methane</b>	99688-47-8	Aldrin	309-00-2
<b>Monomethyl-dichloro-diphenyl methane</b>	81161-70-8	Azinphos ethyl	2642-71-9
<b>Monomethyl-tetrachloro-diphenyl methane</b>	76253-60-6	Azinphos methyl	86-50-0
<b>Isocyanates</b>		Bromophos-ethyl	4824-78-6
1,3-bis(isocyanatomethyl)benzene	3634-83-1	Captafol	2425-06-1
Hexamethylene-di-isocyanate	822-06-0	Carbaryl	63-25-2
Isophorone-di-isocyanate	4098-71-9	Chlordane	57-74-9
Tetramethylxylene-di-isocyanate	2778-42-9	Chlordecone	143-50-0
<b>Diphenylmethane-di-isocyanates</b>	Several	Chlordimeform	6164-98-3
Diphenylmethane-2,2-di-isocyanate	2536-05-2	Chlorfenvinphos	470-90-6
Diphenylmethane-2,4-di-isocyanate	5873-54-1	Chlorobenzilate	510-15-6
Diphenylmethane-4,4-di-isocyanate	101-68-8	Clothianidin	210880-92-5
Methylenediphenyl diisocyanate - mixed isomers	26447-40-5	Coumaphos	56-72-4
<b>Toluene-di-isocyanates</b>	Several	Cyfluthrin	68359-37-5
Toluene-2,4-di-isocyanate	584-84-9	Cyhalothrin, lambda	91465-08-6
Toluene-2,6-di-isocyanate	91-08-7	Cypermethrin	52315-07-8
		Deltamethrin	52918-63-5
		Diazinon	333-41-5
		Dichlorprop	120-36-5
		Dicrotophos	141-66-2
		Dieldrine	60-57-1
		Dimethoate	60-51-5
		Dinotefuran	165252-70-0
		Endosulfan, alpha	959-98-8
		Endosulfan, beta	33213-65-9
		Endrin	72-20-8

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Pesticides (continued)</b>		Phosphamidon	13171-21-6
Esfenvalerate	66230-04-4	Profenophos	41198-08-7
Ethyl parathion	56-38-2	Propetamphos	31218-83-4
Fenvalerate	51630-58-1	Quinalphos	13593-03-8
Heptachlor	76-44-8	Strobane	8001-50-1
Heptachlor epoxide	1024-57-3	Telodrin	297-78-9
Imidacloprid (ISO)	105827-78-9	Thiamethoxam	153719-23-4
	138261-41-3	Tiacloprid	111988-49-9
Isodrin	465-73-6	Toxaphene	8001-35-2
Kelevan	4234-79-1	Tribufos (DEF)	78-48-8
Lindane (ISO)	58-89-9	Trifluralin - containing < 0.5 ppm NPDA	1582-09-8
Malathion	121-75-5	<b>Hexachlorocyclohexane, all isomers</b>	608-73-1
MCPA	94-74-6	<b>Acetamipirid, its salts, esters and compounds</b>	Several
MCPB	94-81-5	Acetamipirid (ISO)	135410-20-7
Mecoprop	93-65-2	Acetamipirid [2]	160430-64-8
Methamidophos	10265-92-6	<b>Dinoseb, its salts, esters and acetate</b>	Several
Methoxychlor	72-43-5	Dinoseb	88-85-7
Methyl parathion	298-00-0	<b>2,4-Dichlorophenoxyacetic acid, salts, esters and compounds</b>	Several
Mevinophos	7786-34-7		
Mirex	2385-85-5	2,4-Dichlorophenoxy acetic acid	94-75-7
Monocrotophos	6923-22-4	<b>Nitenpyram, its salts, esters and compounds</b>	Several
o,p'-Dichlorodiphenyl-dichloroethane	53-19-0	Nitenpyram [1]	150824-47-8
o,p'-Dichlorodiphenyl-dichloroethylene	3424-82-6	Nitenpyram [2]	120738-89-8
o,p'-Dichlorodiphenyl-trichloroethane and its isomers - preparations containing DDT and its isomers	789-02-6	<b>2,4,5-Trichlorophenoxyacetic acid, its salts, esters and compounds</b>	Several
p,p'-Dichlorodiphenyldichloroethane	72-54-8	2,4,5-Trichlorophenoxy acetic acid	93-76-5
p,p'-Dichlorodiphenyl-dichloroethylene	72-55-9	<b>Perfluoroalkyl sulfonic acids and derivatives - PFSA</b>	
p,p'-Dichlorodiphenyl-trichloroethane and its isomers - preparations containing DDT and its isomers	50-29-3	<b>Perfluorooctane sulfonic acid and its derivatives</b>	Several
		<i>Perfluorooctane sulphonic acid and its salts</i>	Several
Perthane	72-56-0	Ammonium perfluorooctane sulfonate	29081-56-9



Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Perfluoroalkyl sulfonic acids and derivatives - PFSA (continued)</b>		<b>Perfluorooctanoic acid related substances</b>	
Diethanolamine perfluorooctane sulfonate	70225-14-8	Methyl perfluorooctanoate	376-27-2
Lithium perfluorooctane sulfonate	29457-72-5	Ethyl perfluorooctanoate	3108-24-5
Perfluorooctane sulfonate	45298-90-6	<i>Perfluorooctylethyl alcohols</i>	Several
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	Perfluorooctylethanol	678-39-7
Potassium heptadecafluoro-octane-1-sulphonate	2795-39-3	<i>Perfluorooctylethyl olefins</i>	Several
<i>Perfluorooctane sulfon amidoethanols</i>	Several	Perfluorooctylethene	21652-58-4
1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	4151-50-2	<i>Perfluorooctylethyl halides</i>	Several
1-Octanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-(2-hydroxyethyl)-	1691-99-2	1H,1H,2H,2H-Perfluorodecyl iodide	2043-53-0
Heptadecafluoro-N-methyloctane sulfonamideoethanol	24448-09-7	Heptadecafluoro-1-iodooctane	507-63-1
<i>Perfluorooctane sulfon polymers</i>	Several	Pentadecafluorooctyl fluoride	335-66-0
<i>Perfluorooctane sulfon halides</i>	Several	Perfluorooctylethyl acrylate or methacrylate	Several
1-Octanesulfonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-	307-35-7	<i>Perfluorooctylethyl polymers</i>	Several
<i>Perfluorooctane sulfon amides</i>	Several	<b>Plasticizers</b>	
Heptadecafluoro-N-methyloctane sulfonamide	31506-32-8	<b>Phthalic acid esters</b>	
Perfluorooctane sulfonamide	754-91-6	Bis-(2-methoxyethyl) phthalate	117-82-8
<i>Perfluorooctane sulfon amidoethyl (meth)acrylates</i>	Several	Butylbenzyl phthalate	85-68-7
<b>Perfluoroalkyl carboxylic acids and derivatives - PFCA</b>		Dibutyl phthalate	84-74-2
<b>Perfluorocarboxylic acids and its salts</b>		Di-cyclohexyl phthalate	84-61-7
<i>Perfluorohexanoic acid and its salts</i>	Several	Diethyl phthalate	84-66-2
Perfluorohexanoic acid (PFHxA)	307-24-4	Diethylhexyl phthalate	117-81-7
<i>Perfluorooctanoic acid and its salts</i>	Several	Di-iso-butyl phthalate	84-69-5
Ammonium pentadecafluoro octanoate	3825-26-1	Di-iso-hexyl phthalate	71850-09-4
Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, sodium salt (1:1)	335-95-5	Di-iso-octyl phthalate	27554-26-3
Perfluorooctanoic acid (PFOA)	335-67-1	Di-iso-pentyl phthalate	605-50-5
Potassium perfluorooctanoate	2395-00-8	Dimethyl phthalate	131-11-3
		Di-n-hexyl phthalate	84-75-3
		Di-n-octyl phthalate	117-84-0
		Dinonyl phthalate	84-76-4
		Di-n-pentyl phthalate	131-18-0

Chemical Name	CAS Number	Chemical Name	CAS Number
<b>Plasticizers (continued)</b>		Fluoranthene	206-44-0
Di-n-propyl phthalate	131-16-8	Fluorene	86-73-7
n-Pentyl-isopentyl phthalate	776297-69-9	Indeno(1,2,3-cd) pyrene	193-39-5
<i>1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters</i>	68515-40-2	Methylpyrene, 1-	2381-21-7
<i>1,2-Benzenedicarboxylic acid, di-C6-8-branched alkylesters, C7-rich</i>	71888-89-6	Naphthalene	91-20-3
<i>1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkylesters</i>	68515-42-4	Naphtho[1,2,3,4-def]chrysene	192-65-4
<i>1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear</i>	68515-50-4	Phenanthrene	85-01-8
<i>1,2-Benzenedicarboxylic acid, dipentylester, branched and linear</i>	84777-06-0	Pyrene	129-00-0
Di-iso-nonyl phthalate - iso & n-Butene based	68515-48-0		
<i>1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters</i>	Several		
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters	68515-51-5		
1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters	68648-93-1		
<i>Di-iso-decyl phthalate</i>	Several		
Di-iso-decyl phthalate [1]	26761-40-0		
Di-iso-decyl phthalate [2]	68515-49-1		
<b>Polyaromatic hydrocarbons (PAHs)</b>			
Acenaphthene	83-32-9		
Acenaphthylene	208-96-8		
Anthracene	120-12-7		
Benzo[ <i>a</i> ]pentaphene	189-55-9		
Dibenzo[ <i>b,def</i> ]chrysene	189-64-0		
Dibenzo[ <i>def,p</i> ]chrysene	191-30-0		
Cyclopenta[ <i>c,d</i> ]pyrene	27208-37-3		
Benzo[ <i>ghi</i> ]perylene	191-24-2		



## 5. Usage range

Consumer goods	Usage range			
	A	B	C	
Automotive			x	Seat fabric - usage range B
Baby wear and textile articles (0 – 3 years)	x			
Backpack			x	Shoulder straps, harness and backrest that have contact with the skin must be usage range A
Bed linen	x			
Bike shorts	x			
Blouse		x		
Bra	x			
Carpet		x		
Cleaning cloth		x		
Curtain			x	
Dress		x		
Furnishing fabric		x		e.g. Seat cover
Geo textiles			x	e.g. building-/construction textiles, erosion protective textiles
Gloves/Mittens	x			
Harness		x		
Headress	x			
Hummock		x		
Jacket		x		



Consumer goods	Usage range			
	A	B	C	
Leggings	x			
Long sleeve t-shirt	x			
Mosquito net			x	
Pants		x		
Pullover		x		
Ropes & slings		x	x	Depends on use
Scarf	x			
Shirt		x		
Skirt		x		
Sleeping bag		x		Lining must be usage range A
Sleeping mattress	x			
Socks	x			
Sport shirt	x			
Sweatshirt		x		
Swim wear	x			
Tent			x	Tent floor must be usage range B
Tie		x		
Tights	x			
Towel		x		
T-Shirt	x			
Underpants (long/short)	x			
Undershirt	x			

## 6. Test items

Test Item	Textiles from natural fibres	Textiles from synthetic fibres	Additional testing for coated or printed textiles	Leather	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.)	Metal parts
<b>Colorants</b>						
with carcinogenic potential	●	●		●	-	-
with allergenous potential	○	●		○	-	-
banned for other reasons	●	●		●	-	-
Flame Retardants (Required if sample declared with functional finishing)	○	○		-	○	-
<b>Fluorinated Substances</b>						
Perfluorooctane sulfonic acid / Perfluorooctane sulfonate (PFOS) (Required if sample declared with stain/water repellent finishing)	○	○		○	-	-
Perfluorocarboxylic acids and salts [PFHxA, PFOA] (Required if sample declared with stain/water repellent finishing)	○	○		○	-	-

Test Item	Textiles from natural fibres	Textiles from synthetic fibres	Additional testing for coated or printed textiles	Leather	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.)	Metal parts
Glycols	-	-		-	-	-
Halogenated Biphenyls, Terphenyls and Naphthalenes	○	○		○	○	-
Halogenated Diarylalkanes	○	○		-	○	-
Isocyanates (Required for PU and for relevant functional finishes)	○	○	PU ●	-	PU ●	-
<b>Monomers</b>						
Acrylamide	○	○		-	○	-
<b>Other Chemical Substances</b>						
Bisphenol A	○	○		-	●	-
Cresol, all isomers	○	○		○	-	-
Dimethylfumarate (Material with direct skin contact; required if the product is packaged with any form of anti-mold agent)	○	○		○	○	-
o-Phenylphenol	○	○		●	-	-
2-Phenyl-2-propanol	-	-		-	EVA ●	-
Pesticides	○	-		○	-	-
Plasticizers	-	-	●	-	●	-
Polyaromatic Hydrocarbons (PAHs) incl. Benzo(a)pyrene	-	-	●	-	●	-

Test Item	Textiles from natural fibres	Textiles from synthetic fibres	Additional testing for coated or printed textiles	Leather	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.)	Metal parts
<b>Polymers</b>						
Polyvinylchloride (PVC)	-	-	●	-	●	-
<b>Solvents</b>						
Benzene	-	-		-	-	-
1,2-Dichloroethane	-	-		-	-	-
Dichloromethane	-	-		-	-	-
N,N-Dimethylacetamide [DMAc]	-	○	○	○ 1	○	-
N,N-Dimethylformamide [DMF]	-	-	●	● 1	○	-
N-Ethyl-2-pyrrolidone [NEP]	○	○		○	○	-
N-Methylpyrrolidone [NMP]	○	○		○	○	-
Tetrachloroethylene	○	○		○	○	-
Toluene	-	-	●	● 1	●	-
Trichloroethylene	○	○		●	○	-
Xylene, all isomers	-	-		-	-	-
Tin Organic Compounds	○	○	●	● 1	●	-

CAS-numbers, test methods, complete chemicals list: see RSL

- Testing strongly recommended
- Testing recommended
- Substances or group of substances with high probability not relevant
- 1 Only if finishing of leather includes coating with solvents