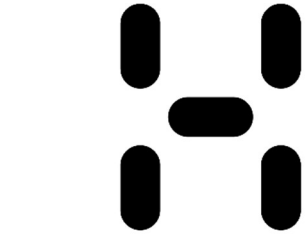

Haglöfs

Restricted Substances List (RSL) v16

Valid from January 2026

Gustavlundsvägen 141, 167 51 Bromma, SWEDEN
E-mail: info@haglofs.se | Phone: +46 770 178 900 | www.haglofs.com | REG.NO. 556054-8694

Contents

Introduction

Haglöfs requires that its products, and the raw materials used to construct those products, are manufactured with regard for the safety of consumers and factory workers, as well as the wider environment. The management of chemicals in the supply chain directly impacts these areas.

The Restricted Substances List (RSL) provides details of chemicals and other materials that are restricted by Haglöfs, and allowable chemical limits for products placed on the market. It is expected that Haglöfs' suppliers use industry best practices to proactively manage chemicals, meeting the requirements of the RSL and relevant regulations in the markets in which we operate as well as providing safeguards for consumers, workers and the environment.

- The Haglöfs RSL applies to all materials, components, finished products* and packaging manufactured and sold under the Haglöfs brand name whether sourced directly or by Haglöfs licensee partners
- All promotional items bearing Haglöfs logo must meet the requirements listed in the RSL and may be subject to further requirements in the case that items do not fall within typical Haglöfs product categories (get in touch with your Haglöfs contact if in any doubt)
- Haglöfs reserves the right to request testing of any material or product at any time against this RSL
- Suppliers should certify their compliance to the Haglöfs RSL by signing the *Supplier Compliance Declaration*

Restricted Substances

Restricted Substances List

Products (See Appendix 1)

Haglöfs follows the bluesign® RSL for all products* and currently refers to version 16. The bluesign® RSL is updated periodically, refer to the bluesign® website for the latest version. www.bluesign.com/en/downloads

Packaging (See Appendix 2)

In the case of packaging there are no specific bluesign® guidelines therefore Haglöfs follows the AFIRM Group RSL for packaging. Refer to the AFIRM Group website for the latest version of the RSL. Versions are also available in Spanish, Chinese and Vietnamese. www.afirm-group.com

*Applicable for apparel and hardware. For footwear, please see Haglöfs Restricted Substances List Footwear

Additional requirements

In addition to the restrictions outlined in Appendix 1 and 2 the following requirements must be met:

- Biocides and anti-microbial finishes
  - The use of biocides or anti-microbial finishes as odour control or to inhibit growth of mould during storage/transportation is prohibited.
- Per- and polyfluoroalkyl substances (PFAS)
  - The use of PFAS as a water or stain repellent is prohibited except for limited use cases which have been approved by Haglöfs.
  - Where silicone based DWR alternatives are used it is prohibited that the cyclosiloxanes (D4, D5, D6) are present
- Polyvinyl chloride (PVC)
  - The use of PVC is prohibited except for limited use cases which have been approved by Haglöfs
- Animal-based materials
  - The use of animal-based materials is restricted, see the *Haglöfs Animal Welfare Policy* for more details.
- Oxo-degradable plastics
  - The use of oxo-degradable plastics in Haglöfs packaging is prohibited.

EU REACH Substances of Very High Concern (SVHC)

REACH is the regulatory framework for chemicals in the European Union (EU) administered by the European Chemical Agency (ECHA). Substances that are found to be particularly hazardous are added to a Candidate List of Substances of Very High Concern (SVHC).

Placing a substance on the Candidate List triggers specific obligations for importers, producers, and suppliers of any article that contains one or more of these substances above 0.1 percent by weight per component. The obligations include providing enough information to allow safe use of the article to brand and retail customers or, upon request, to a consumer within 45 days of receipt of the request.

ECHA periodically updates the Candidate List and some SVHCs may become the subject of authorisation requirements or more stringent legislation. The most current version can be found at https://www.echa.europa.eu/candidate-list-table

Suppliers must stay up to date with any additions to the list and notify Haglöfs immediately if substances found on this list are identified in materials or products.

California Proposition 65 Substances

Each year, California publishes a list of chemicals known to the state to cause cancer or reproductive toxicity. Businesses that expose individuals to one or more of these chemicals must provide a clear and reasonable warning before the exposure occurs. For consumer products, this is typically through warning labels on the products or retail signage. Enforcement is carried out through civil lawsuits brought by the California attorney general, district attorneys, or private parties acting in the public interest.
Additional information can be found at https://oehha.ca.gov/proposition-65

Suppliers must stay up to date with any additions to the list and notify Haglöfs immediately if substances found on this list are identified in materials or products.

Supplier's Responsibility

It is the supplier's responsibility to comply with the RSL, avoiding the use of harmful or illegal chemicals in the making of Haglöfs products. RSL compliance is included in, or additional to, all legal partnership agreements relating to the manufacture of Haglöfs product lines.

Haglöfs expects suppliers to:

- provide evidence that materials, components, finished products or packaging supplied meet the RSL - responsibility for testing and associated costs lies with the supplier
- ensure that chemicals are handled safely by workers and that any emissions from facilities such as waste and wastewater, and the handling of such emissions comply with all applicable environmental laws and regulations
- provide access to Haglöfs representatives to visit any locations used in the production of materials, components, finished products or packaging for Haglöfs

With specific reference to the EU REACH SVHC Candidate list and the California Proposition 65 substances list the supplier must notify Haglöfs immediately if substances found on either of these lists are identified in materials, products or packaging. It is the supplier's responsibility to keep up to date with any changes to the lists.

Haglöfs conducts a risk-based testing program and reserves the right to request that suppliers provide samples and/or test against the RSL at any time.

Haglöfs will assess any failure against the RSL standards on a case by case basis and take appropriate action. In the event of a test failure, suppliers will be required to conduct failure analysis and, where appropriate, provide an action plan to resolve the issue for current and/or future production. Suppliers may be required to remediate products, remake products or replace affected components at their own cost.

Tier 1 (finished-goods) factories are required to maintain records of testing on materials from local suppliers as well as those produced in-house.

Testing

It is expected that suppliers can provide evidence that their products meet the RSL. Responsibility for testing and associated costs lies with the supplier.

Suppliers should routinely test their materials for compliance against the Haglöfs RSL as well as related lists such as the REACH SVHC List and the California Proposition 65 List, supplying evidence of this testing as and when requested by Haglöfs.

The Product and Packaging Testing Matrices (Appendix 1b and 2b) outline the recommended tests for different categories of materials based on the likelihood of restricted substances being detected. Suppliers should use this as a tool to guide their efforts to manage restricted substances.

All material and product testing conducted for the purposes of assessing compliance with the Haglöfs RSL should be carried out by testing institutes that are ISO 17025 certified and are part of a global network which can ensure standard methods and level of quality.

Test results are valid for one year from the test date unless otherwise stated.

Certifications will be accepted in lieu of chemical testing as follows:

- **bluesign®** The supplier can provide a copy of a bluesign® certificate for the production facility where the material was made **AND** the fabric or trim is listed with the appropriate item number/code in the blueguide®
- **Oeko-tex®** The supplier can provide a copy of the STeP by Oeko-tex® certificate for the production facility where the material was made **AND** the supplier can provide a copy of the Standard 100 by Oeko-tex® certificate for the fabric or trim item (or Leather Standard by Oeko-tex® certificate for leather items).

Contamination

- The supplier shall maintain full responsibility for ensuring that no unauthorized or unintended substances are present in the product. This responsibility includes not only responding when a substance is detected, but also proactively establishing, implementing, and maintaining robust processes to control the use of substances, prevent contamination, and ensure full oversight of all materials and production outputs.

- Should any substance nonetheless be detected in the product—regardless of whether it results from contamination, inadequate controls, or any other cause, the supplier shall be solely responsible for promptly identifying the source, implementing immediate corrective and preventive measures, and eliminating its presence in all current and future supplies. The supplier shall notify the buyer in writing of all measures taken and shall ensure that all remediation activities comply with applicable regulatory requirements and standards.

Chemical Input and Output Management

Managing restricted substances includes controlling the chemical formulations that enter facilities. Suppliers should use the systems below to screen for compliant formulations. In addition to input controls, suppliers must also maintain processes to monitor and manage production outputs to ensure that no unintended or unauthorized substances are introduced through manufacturing activities, cross-contamination, or other process sources.

bluesign®FINDER: A database called the bluesign® FINDER can be used to select and screen for approved chemicals. For more information visit www.bluesignFINDER.com

ZDHC Manufacturing Restricted Substances List (MRSL): Manufacturers should contact their chemical suppliers and communicate the ZDHC MRSL standard to them. Chemical suppliers should be able to confirm which of their products meet this standard. A copy of the most current ZDHC MRSL can be downloaded from the ZDHC website www.roadmaptozero.com/mrsl_online

For any questions about the RSL please contact productcompliance@haglofs.se

Appendix 1a: Product Restricted Substances List (RSL)

The bluesign® RSL is an extract of the bluesign® system substances list (BSSL) consumer safety limits and defines minimum requirements for chemical substances in articles.

Usage range

Usage ranges 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/bans:

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

Testing methods

The testing methods listed are the recommended ones. The testing methods column consists of two entries: sample preparation, e.g. extraction, digestion, derivatization 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:

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	Purge & trap is recommended
DIN EN ISO 105-E04 (2013)	Acidic sweat solution	37	60	Textile to liquor ratio 1:50

Restricted Parameters

Parameter	Limit	Test Method// Sample Preparation
pH	Non-leather products: 4.0-7.5	ISO 3071 (2005)
	Leather products: 3.2 – 4.5 (chrome tanned leather products) 3.5 – 7.9 (other leather products)	ISO 4045 (2018)
Odor	No unpleasant odor shall be emitted from the products	SNV 195 651
Color Fastness Properties		
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)

Restricted Substances

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Aldehydes									
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)	
Alkylphenolethoxylates (APEOs)									
Alkylphenolethoxylates (APEOs)	Several	All	Usage ban		100		mg/kg		For sum of all restricted APEO. Goal should be 100 mg/kg for APEOs + APs. Test methods: See NPEO. For recycled materials a higher limit up to 500 mg/kg is accepted when it complies with the requirements under REACH.
Nonylphenol ethoxylates (NPEO)	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	ISO 18218-8(2023)	
Octylphenol ethoxylates (OPEO)	Several	Leather	Usage ban		100		mg/kg	See NPEO	
		Textiles Metal parts Polymer parts Down/feather articles	Usage ban		100		mg/kg	See NPEO	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Alkylphenols (APs)									
Alkylphenols (APs)	Several	All	Usage ban		10		mg/kg		For sum of all alkylphenols.
Nonylphenol (NP), mixed isomers	Several	Textiles Leather	Usage ban		10		mg/kg	EN ISO 21084 (2019)	For sum of all allocated Members/Substances Single substances listed in Annex
		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	
Octylphenol (OP), mixed isomers	Several	Textiles Leather	Usage ban		10		mg/kg	EN ISO 21084 (2019)	For sum of all allocated Members/Substances Single substances listed in Annex
		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	
Amines									
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)	
Arylamines									
Arylamines	Several	Leather	Usage ban		20 each		mg/kg	EN ISO 17234-1 (2020) EN ISO 17234-2 (2011) // for azo colorants which may release 4-Aminoazobenzene	Usage ban 20 mg/kg for every allocated arylamine and its corresponding salts (as substance for example in PU, and as decomposition product of azo colorants)
		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	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Biocides									
Biocides: Independent from the biocidal substances listed in the RSL, the supplier shall always be requested to declare whether biocides were used or not. Identity of the relevant biocides shall be disclosed by name and CAS No. Declaration duty shall be laid down in the purchase specification.									
Dimethylfumarate	624-49-7	All	Usage ban	0.1			mg/kg	ISO 16186 (2021)	
o-Phenylphenol and its salts	Several	Leather	Limitation	50	100	200	mg/kg	ISO 13365-1	
		Textiles	Limitation	50			mg/kg	EN 17134-1	
Pyrithione zinc	13463-41-7	All	Usage ban	10			mg/kg	DIN EN 16711-1 (2016) // Total content	Testing: Zn metal content, in case of positive result further testing with CE/ICP-MS
Chlorinated Benzenes and Toluenes									
Chlorinated Benzenes and Toluenes	Several	All	Usage ban	1.0	5.0	5.0	mg/kg	EN 17137(2024)	For sum of all allocated chlorinated benzenes and toluenes // additional regulation for each allocated Member/Substance - Usage ban 1.0 mg/kg

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Chlorinated Phenols									
Mono- and Dichlorophenols	Several	All	Usage ban	1.0			mg/kg	EN 17134-2(Textile) EN ISO 17070 (Leather)	For sum of all allocated Mono- and DiCPs
Pentachlorophenol, its salts, esters and compounds	Several	All	Usage ban	0.05	0.5	0.5	mg/kg		For sum of all allocated PCPs
Tetrachlorophenol, its salts and compounds	25167-83-3	All	Usage ban	0.05	0.5	0.5	mg/kg		For sum of all allocated TeCPs
Trichlorophenol, all isomers	25167-82-2	All	Usage ban	0.05	0.5	0.5	mg/kg		For sum of all allocated TriCPs
Colorants									
Colorants banned for other reasons	Several	All	Usage ban	20 each			mg/kg	DIN 54231 (2022)	Usage ban 20 mg/kg for every allocated Member/Substance
Colorants with allergenic potential	Several	All	Usage ban	20 each			mg/kg		
Colorants with carcinogenic potential	Several	All	Usage ban	20 each			mg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Dioxins and Furans									
Dioxins and Furans - Group 1 and 2	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
Dioxins and Furans - Group 1	Several	All	Usage ban	1.0			µg/kg		For sum of all allocated Members/Substances to Group 1 Single substances listed in Annex
Dioxins and Furans - Group 3	Several	All	Usage ban	95			µg/kg		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
Dioxins and Furans - Group 4 and 5	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
Dioxins and Furans - Group 4	Several	All	Usage ban	1.0			µg/kg		For sum of all allocated Members/Substances to Group 4 Single substances listed in Annex
Fibers									
Asbestos	Several	All	Usage ban	Not detected				REM/EDX BGI 505-46 U.S. EPA/600/R-93/116	Single substances listed in Annex

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Flame retardants									
Antimony trioxide	1309-64-4	All	Limitation	260	260		mg/kg	DIN EN 16711-1 (2016)	
Tetrabromobisphenol A - (TBBP A)	79-94-7	All	Usage ban		5.0		mg/kg	EN ISO 17881-1 (2016)	
Tetrabromobisphenol A bis(2,3-dibromopropylether)	21850-44-2		Usage ban		5.0		mg/kg		
Tri(aziridin-1-yl) phosphine oxide - (TEPA)	545-55-1		Usage ban		5.0		mg/kg	EN ISO 17881-2 (2016)	
Bis(2,3-dibromopropyl) phosphate - (BDBPP)	5412-25-9		Usage ban		5.0		mg/kg		
Trimethyl phosphate	512-56-1		Usage ban		5.0		mg/kg		
Tri-o-cresyl phosphate	78-30-8		Usage ban		5.0		mg/kg		
Tris(methylphenyl) phosphate	1330-78-5		Usage ban		5.0		mg/kg		
Tris(2-chloroethyl) phosphate - (TCEP)	115-96-8		Usage ban		5.0		mg/kg		
Tris-(2-chloro-1-methylethyl)phosphate - (TCPP)	13674-84-5		Usage ban		5.0		mg/kg		
Tris-[2-chloro-1-(chloromethyl)ethyl] phosphate -(TDCP or TDCPP)	13674-87-8		Usage ban		5.0		mg/kg		
Tris(2,3-dibromopropyl) phosphate - (TRIS)	126-72-7		Usage ban		5.0		mg/kg		
Trixylyl phosphate - (TXP)	25155-23-1		Usage ban		5.0		mg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Flame retardants (continued)									
Brominated alkyl alcohols	Several								
2,2-Bis(bromomethyl)-1,3-propanediol - (BBMP)	3296-90-0	All	Usage ban	5.0			mg/kg	EN ISO 17881-1 (2016)	
2,3-Dibromopropan-1-ol - (2,3-DBPA)	96-13-9								
1-Propanol, 2,2-dimethyl-, tribromo deriv.	36483-57-5 1522-92-5								
Chlorinated Paraffins, all chain lengths	Several	Textiles Metal parts Polymer parts Down/feather articles	Usage ban	5.0 each			mg/kg		Usage ban 5.0 mg/kg for every allocated group.
		Leather	Usage ban	100 each			mg/kg		Usage ban 100 mg/kg for every allocated group.
Paraffin, C10-C13, chlorinated - (SCCP)	85535-84-8	Textiles Metal parts Polymer parts Down/feather articles	Usage ban	5.0 each			mg/kg	ISO 22818 (2021)	
		Leather	Usage ban	100 each			mg/kg	ISO 18219 (2021)	
Paraffin, C14-C17, chlorinated - (MCCP)	85535-85-9	Textiles Metal parts Polymer parts Down/feather articles	Usage ban	5.0 each			mg/kg	ISO 22818 (2021)	
		Leather	Usage ban	100 each			mg/kg	ISO 18219 (2021)	

Paraffin, C18-C28, chlorinated - (LCCP)	85535-86-0	Textiles Metal parts Polymer parts Down/feather articles	Usage ban	5.0 each	mg/kg	LC-MS	
		Leather	Usage ban	100 each	mg/kg		
Paraffin wax, chlorinated	85535-85-9	Textiles Metal parts Polymer parts Down/feather articles	Usage ban	5.0 each	mg/kg		
		Leather	Usage ban	100 each	mg/kg		
Hexabromocyclododecan, all isomers - group for all major diastereoisomers identified	Several	All	Usage ban	5.0	mg/kg	EN ISO 17881-1 (2016)	
Polybrominated diphenyl ethanes	Several						
Decabromodiphenylethane (DBDPE)	84852-53-9	All	Usage ban	5.0	mg/kg	EN ISO 17881-1 (2016)	
Polybrominated diphenyl ethers	Several		Usage ban	5.0	mg/kg		Usage ban 5.0 mg/kg for every allocated Member/Substance

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Glycols									
2-Ethoxyethanol	110-80-5	All	Usage ban	5.0			mg/kg	GC-MS // Extraction with Methanol Plastic articles: 2-Step extraction with THF and Methanol	
2-Ethoxyethyl acetate	111-15-9	All	Usage ban	5.0			mg/kg		
2-Methoxy-1-propanol	1589-47-5	All	Usage ban	5.0			mg/kg		
2-Methoxyethanol	109-86-4	All	Usage ban	5.0			mg/kg		
2-Methoxyethyl acetate	110-49-6	All	Usage ban	5.0			mg/kg		
2-Methoxypropyl acetate	70657-70-4	All	Usage ban	5.0			mg/kg		
Bis(2-methoxyethyl) ether	111-96-6	All	Usage ban	5.0			mg/kg		
Ethylene glycol dimethyl ether	110-71-4	All	Usage ban	5.0			mg/kg		
Triethylene glycol dimethyl ether	112-49-2	All	Usage ban	5.0			mg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Halogenated Biphenyls, halogenated Terphenyls and halogenated Naphthalenes									
Polybrominated Biphenyls	59536-65-1	All	Usage ban	5.0			mg/kg	EN ISO 17881-1 (2016)	For sum of all allocated Members/Substances
Polybrominated Naphthalenes	Several	All	Usage ban	0.5			mg/kg		
Polybrominated Terphenyls	Several	All	Usage ban	1.0			mg/kg		
Polychlorinated Biphenyls	1336-36-3	All	Usage ban	1.0			mg/kg	ISO/TR 17881-3 (2018)	
Polychlorinated Naphthalenes	Several	All	Usage ban	0.5 each			mg/kg		Usage ban 0.5 mg/kg for every allocated Member/Substance
Polychlorinated Terphenyls	61788-33-8	All	Usage ban	1.0			mg/kg		For sum of all allocated Members/Substances
Halogenated Diarylalkanes									
Halogenated Diarylalkanes	Several	All	Usage ban	1.0 each			mg/kg	GC-MS // Extraction following DIN EN 62321-6 (2016)	Usage ban // 1.0 mg/kg for every allocated Member/Substance
Isocyanates									
Isocyanates	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

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Metals									
Antimony, its salts and compounds	Several								
Antimony – as content	7440-36-0	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	As total metal content // valid for polyester fibers (also dope dyed), but not for finished polyester textiles.
Arsenic, its salts and compounds	Several								
Arsenic – as content	7440-38-2	Textiles Metal parts Polymer parts Down/feather articles	Usage ban		10		mg/kg	DIN EN 16711-1 (2016) // Total content	As total metal content .
			Usage ban		0.2		mg/kg	DIN EN 16711-2 (2016) // Acidic sweat solution	As extractable metal content.
		Leather	Usage ban		10		mg/kg	EN ISO 17072-2 (2019) // Total content	As total metal content .
					0.2		mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	As extractable metal content.

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method/ Sample Preparation	Comment
Metals (continued)									
Barium, its salts and compounds	Several								
Barium - as content	7440-39-3	All	Limitation	1000			mg/kg	EN 71-3 (2019) // Acidic solution migration simulating gastric juices DIN EN ISO 17294-2 (2017) DIN EN ISO 11885 (2009)	As extractable metal content.
Cadmium, its salts and compounds	Several								
Cadmium – as content	7440-43-9	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	
Chromium VI, its salts and compounds	Several								
Chromium VI – as content	18540-29-9	Textiles Polymer parts Down/feather articles	Usage ban	0.5			mg/kg	EN ISO 17075-2 (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)	As extractable metal content. For leather: Thermal pre-ageing test required in advance: ISO 0195:2018.

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Metals (continued)									
Chromium, its salts and compounds – except Chromium VI, its salts and compounds	Several								
Chromium – as content	7440-47-3	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
		Leather	Limitation		0.5		mg/kg	EN ISO 17072-1 (2019) // Acidic sweat solution	Chromium extractable leather limit applies only for the leather that is not tanned with chromium
Cobalt, its salts and compounds	Several								
Cobalt – as content	7440-48-4	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
Copper, its salts and compounds	Several								
Copper – as content	7440-50-8	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
Metals (continued)									
Lead, its salts and compounds	Several								
Lead – as content	7439-92-1	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	
Mercury, its salts and compounds	Several								
Mercury - as content	7439-97-6	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	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Metals (continued)									
Nickel, its salts and compounds	Several								
Nickel – as content	7440-02-0	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 Down/feather	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/cm²/week	EN 1811 (2011) + A1 (2015) // Release EN 12472 (2020)	Usage ban for A and B // Release // as metal content.
Monomers									
Acrylamide	79-06-1	All	Usage ban	1.0			mg/kg	CEN/TS 13130-10 (2005)	
Other Chemical Substances									
1-Butyl glycidyl ether	2426-08-06	All	Usage ban	1	10	10	mg/kg	GC-MS // Extraction with Methanol	
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	Proof that consumer safety limit for ADCA is kept via finished article testing
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	LC-MS // LC-MS/MS // LC-PDA // Extraction with Methanol or Methanol: Tetrahydrofuran (1:1)	Reporting limit: 10 ppm. Specific limit for leather tanning and textile aftertreatment: 500 ppm.
Bisphenol AF	1478-61-1	All	Usage ban	40	100	100	mg/kg		
Bisphenol F	620-92-8	All	Limitation	100			mg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Other Chemical Substances (continued)									
Bisphenol S	80-09-1	All	Usage ban	1	10	10	mg/kg		Exception for textile aftertreatment: 200 mg/kg Exception for leather tanning: 500 mg/kg
Dimethyl hydrogen phosphite	868-85-9	All	Usage ban	25	50	50	mg/kg	GC-MS // Extraction with Methanol	
Michler's ketone	90-94-8	All	Usage ban	100			mg/kg	LC-MS / DAD // with reference to DIN 54231	
Michler's base	101-61-1	All	Usage ban	100			mg/kg		
Triphenyl phosphate	115-86-6	All	Usage ban	100	1000	1000	mg/kg	EN ISO 17881-2 (2016)	
Dicumyl peroxide	80-43-3	All	Usage ban	200			mg/kg	LC-DAD // Solvent extraction	
Cresol, all isomers	1319-77-3	All	Usage ban					BVL B 82.02-8 (2001) // Extraction with KOH DIN EN ISO 17070 (2015) // Extraction with KOH	10 mg/kg for each isomer
m-Cresol	108-39-4	All	Usage ban	10			mg/kg		
o-Cresol	95-48-7	All	Usage ban	10			mg/kg		
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 Leather	Usage ban	50	50	200	mg/kg	ISO 16189 (2021)	
Phenol	108-95-2	All	Limitation	20	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	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
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	
Siloxanes	Several	All	Usage ban					GC // with reference to TEGEWA method (2021)	Usage ban for every allocated member/substances
Octamethyl cyclotetrasiloxane (D4)	556-67-2	All	Usage ban		500		mg/kg		
Decamethyl cyclopentasiloxane (D5)	541-02-6	All	Usage ban		500		mg/kg		
Dodecamethyl cyclohexasiloxane (D6)	540-97-6	All	Usage ban		500		mg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Ozone Depleting Substances									
Ozone Depleting Substances (according to Regulation (EU) 2024/590)	Several	All	Usage ban					GC-MS // Headspace	Usage ban for direct use in manufacturing of articles // 0.1 mg/kg for every allocated Member/Substance
Ozone depleting substances (CFCs) class I	Several		Usage ban						Usage ban for direct use in manufacturing of articles // 0.1 mg/kg for every allocated Member/Substance Single substances listed in Annex
Ozone depleting substances (CFCs) class II	Several		Usage ban						
Pesticides									
Pesticides	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
PFAS (Poly- and perfluoroalkyl substances)									
PFAS (Poly- and perfluoroalkyl substances)	Several	All	Usage ban		50		mg/kg	EN 14582 (total fluorine) ASTM 07359 (total fluorine)	Limit refers to total fluorine content. Exceptions might be possible for specific uses. Supplier must report exceptions via the Supplier Compliance Declaration.
Reaction mass of 2,2,3,3,5,5,6,6- octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine		Leather	Usage ban		100		µg/kg	EN ISO 23702-1 (2023)	
		Textiles Down/feather Polymer parts Metal parts	Usage ban		100		µg/kg	EN 17681-1 (2025)	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
PFAS (Poly- and perfluoroalkyl substances) – continued									
Perfluorohexane sulfonic acid and its derivatives	Several	All	Usage ban					Leather: EN ISO 23702-1 (2018) Other materials: EN 17681-1 (2025)	Single substances listed in Annex.
Perfluorohexane sulfonic acid and its salts	Several	All	Usage ban		20		µg/kg		
Perfluorohexane sulfon amides	Several	All	Usage ban		20		µg/kg		
Perfluorohexane sulfon amidoethanols	Several	All	Usage ban		20		µg/kg		
Perfluorohexane sulfon amidoethyl (meth)acrylates	Several	All	Usage ban		20		µg/kg		
Perfluorohexane sulfon halides	Several	All	Usage ban		20		µg/kg		
Perfluorohexane sulfon polymers	Several	All	Usage ban		20		µg/kg		
Perfluorooctane sulfonic acid and its derivatives	Several	All	Usage ban		1000		µg/kg		
Perfluorohexanoic acid and its salts	Several	All	Usage ban		25		µg/kg		
Perfluoroheptanoic acid and its salts	Several	All	Usage ban		50		µg/kg		
Perfluorooctanoic acid and its salts	Several	All	Usage ban		25		µg/kg		
Perfluorocarboxylic acids (C9-C14) and its salts	Several	All	Usage ban		25		µg/kg		
Perfluorohexanoic acid related substances	Several	All	Usage ban		1000		µg/kg		
Perfluorooctanoic acid related substances	Several	All	Usage ban		1000		µg/kg		
Perfluorocarboxylic acids (C9-C14) related substances	Several	All	Usage ban		260		µg/kg		

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Plasticizers									
Phthalic acid esters	Several	Textiles	Usage ban					EN ISO 14389 (2014) CPSC-CH-C1001-09.4	Usage ban 50 mg/kg for every allocated Member/Substance
		Down/feather Leather Polymer parts Metal parts	Usage ban					CPSC-CH-C1001-09.	
Polyaromatic hydrocarbons (PAHs)									
Polyaromatic hydrocarbons (PAHs)	Several	All	Usage ban	10				AfPS GS 2019 Alternative test methods: EN17132 or ISO 16190	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)fluoroanthene	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)fluoroanthene	205-82-3	All	Usage ban	0.5	1.0	1.0	mg/kg		
Benzo(k)fluoroanthene	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		
Polymers									
Polyvinyl chloride	9002-86-2	All	Usage ban	See comment				Total chlorine (EN 14582) //FTIR (when chlorine detected)	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.

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Solvents									
1,2-Dichloroethane	107-06-2	All	Usage ban	1.0			mg/kg	GC-MS // Headspace	
1,2-Dichloropropane	78-87-5	All	Usage ban	5.0			mg/kg	GC-MS // Headspace	Exception is valid for chemicals used in paint stripping process in closed systems
2-Ethylhexanoic acid	149-57-5	All	Usage ban	40	200	200	mg/kg	GC-MS // Solvent Extraction with Hexane: DCM (1:1)	
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	Exception is valid for chemicals used in paint stripping process in closed systems
Isophorone	78-59-1	All	Limitation	20	100	100			
N,N-Dimethylacetamide (DMAc)	127-19-5	Textile	Usage ban	5.0			mg/kg	EN 17131 (2019)	Exceptions: Textile articles produced by solvent coating, lamination or fiber manufacturing - A/B/C 50 mg/kg. As residual fiber solvent in elastane and PAN fibers with Monitoring status - A: 10 mg/kg, B/C: 50 mg/kg.
		Leather	Usage ban	5.0			mg/kg	EN ISO 19070 (2016)	
		Metal parts Polymer parts Down/feather	Usage ban	5.0			mg/kg	ISO 16189 (2021)	
N,N-Dimethylformamide (DMF)	68-12-2	Textiles	Usage ban	5.0			mg/kg	EN 17131 (2019)	Exceptions for textiles: Specific limits are defined for articles produced by lamination and fiber manufacturing - A/B/C = 50 mg/kg or by solvent coating, A/B/C = 50/50/250 mg/kg.
		Metal parts Polymer parts Down/feather	Usage ban	5.0			mg/kg	ISO 16189 (2021)	
		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)	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
		Metal parts Polymer parts Down/feather	Usage ban	10	10	100	mg/kg	ISO 16189 (2021)	
		Textiles	Usage ban	10	10	100	mg/kg	EN 17131 (2019)	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Solvents (continued)									
N-Methylpyrrolidone (NMP)	872-50-4	Textiles	Usage ban	10	10	100	mg/kg	EN 17131 (2019)	
		Metal parts Polymer parts Down/feather articles	Usage ban	10	10	100	mg/kg	ISO 16189 (2021)	
		Leather	Usage ban	10	10	100	mg/kg	EN ISO 19070 (2016)	
Tetrachloroethylene	127-18-4	All	Usage ban	1.0			mg/kg	GC-MS // Headspace	Exception is valid for articles produced by dry cleaning process. Limit when used as solvent in dry cleaning: 10 mg/kg
Toluene	108-88-3	All	Limitation	10	50	50	mg/kg	GC-MS // Headspace	Exception valid for solvent coating, laminating and painting/lacquering.
Trichloroethylene	79-01-6	All	Usage ban	5.0			mg/kg	GC-MS // Headspace	
Xylene, all isomers	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. Limits valid for all articles.
Tin-organic Compounds									
Methyltin compounds	Several		Usage ban						
Dimethyltin compounds (DMT)	Several	All	Usage ban	0.5			mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	
Monomethyltin compounds (MMT)	Several	All	Usage ban	1.0			mg/kg		
Trimethyltin compounds (TMT)	Several	All	Usage ban	0.5			mg/kg		
Ethyltin compounds	Several		Usage ban						
Tetraethyltin compounds (TeET)	Several	All	Usage ban	1.0			mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	

Chemical Name	CAS Number	Sector of Use	Limit Type	A	B	C	Unit	Test Method// Sample Preparation	Comment
Tin-organic Compounds (continued)									
Propyltin compounds	Several		Usage ban						Usage ban for all allocated Members/Substances
Dipropyltin compounds (DPT)	Several	All	Usage ban		1.0		mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	
Tripropyltin compounds (TPT)	Several	All	Usage ban		0.5		mg/kg		
Butyltin compounds	Several		Usage ban						
Dibutyltin compounds (DBT)	Several	All	Usage ban		1.0		mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	
Monobutyltin compounds (MBT)	Several	All	Usage ban		1.0		mg/kg		
Tetrabutyltin compounds (TeBT)	Several	All	Usage ban		0.5		mg/kg		
Tributyltin compounds (TBT)	Several	All	Usage ban		0.5		mg/kg		
Hexyltin compounds	Several		Usage ban						
Tricyclohexyltin compounds (TCyHT)	Several	All	Usage ban		0.5		mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	
Octyltin compounds	Several		Usage ban						
Dioctyltin compounds (DOT)	Several	All	Usage ban		1.0		mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	
Monooctyltin compounds (MOT)	Several	All	Usage ban		1.0		mg/kg		
Tetraoctyltin compounds (TeOT)	Several	All	Usage ban		0.5		mg/kg		
Trioctyltin compounds (TOT)	Several	All	Usage ban		0.5		mg/kg		
Phenyltin compounds	Several		Usage ban						
Diphenyltin compounds (DPhT)	Several	All	Usage ban		1.0		mg/kg	ISO 16179 (2025) EN ISO 22744-1 (2020)	
Monophenyltin compounds (MPhT)	Several	All	Usage ban		1.0		mg/kg		
Triphenyltin compounds (TPhT)	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
UV stabilizers									
UV-320	3846-71-7	All	Usage ban	1000			mg/kg	ISO 24040 // Extraction with Tetrahydrofuran // GC-MS	
UV-326	3896-11-5		Usage ban	1000			mg/kg		Articles need to comply latest 01 July 2026
UV-327	3864-99-1		Usage ban	1000			mg/kg		
UV-328	25973-55-1		Usage ban	1.0			mg/kg		
UV-329	3147-75-9		Usage ban	1000			mg/kg		Articles need to comply latest 01 July 2026
UV-350	36437-37-3		Usage ban	1000			mg/kg		

Appendix 1b: Single Substances

The tables below list single substances belonging to the following groups:

- Arylamines
- Biocides
- Chlorinated Benzenes and Toluenes
- Chlorinated Phenols
- Colorants
- Dioxins and Furans
- Fibers
- Flame Retardants
- Halogenated Diarylalkanes
- Isocyanates
- Pesticides
- PFAS (Poly- and perfluoroalkyl substances)
- Plasticizers
- Polyaromatic hydrocarbons (PAHs)
- Tin-organic compounds

Limit values and test methods are provided in Appendix 1a.

Chemical Name	CAS Number	Chemical Name	CAS Number
Arylamines		***Xylidines and its salts - with the exception of those specified elsewhere***	Several
2,4-Diaminoanisole and its salts	Several		
2,4-Diaminoanisole	615-05-4	*2,4-Xylidine and its salts*	Several
2,4-Diaminoanisole sulphate	39156-41-7	2,4-Xylidine	95-68-1
2,4-Diaminotoluene and its salts	Several	*2,6-Xylidine and its salts*	Several
2,4-Diaminotoluene	95-80-7	2,6-Xylidine	87-62-7
2-Naphthylamine and its salts	Several	***Nitrotoluidines and its salts***	Several
2-Naphthylamine	91-59-8		
2-Naphthylammoniumacetate	553-00-4	*2-Amino-4-nitrotoluene and its salts*	Several
4,4'-Diaminodiphenylmethane and its salts	Several	2-Amino-4-nitrotoluene	99-55-8
4,4'-Diaminodiphenylmethane	101-77-9	***Anisidines and its salts***	Several
4,4'-Methylenebis-(2-chloraniline) and its salts	Several	Anisidine (o-, p-isomers)	29191-52-4
4,4'-Methylenebis-(2-chloraniline)	101-14-4	*2-Anisidine and its salts*	Several
4-Amino-3-fluorophenol and its salts	Several	2-Anisidine	90-04-0
4-Amino-3-fluorophenol	399-95-1	***Benzidines and its salts***	Several
4-Aminobiphenyl and its salts	Several		
4-Aminobiphenyl	92-67-1	*3,3'-Dichlorobenzidine and its salts*	Several
4-Chloroaniline and its salts	Several		
4-Chloroaniline	106-47-8	3,3'-Dichlorobenzidine	91-94-1
6-Amino-2-ethoxynaphthalene and its salts	Several	*o-Dianisidines and its salts*	Several
6-Amino-2-ethoxynaphthalene	293733-21-8		
o-Aminoazotoluene and its salts	Several	3,3'-Dimethoxybenzidine	119-90-4
o-Aminoazotoluene	97-56-3	*3,3'-Dimethylbenzidine and its salts*	Several
p-Aminoazobenzene and its salts	Several	3,3'-Dimethylbenzidine	119-93-7
p-Aminoazobenzene	60-09-3	*Benzidine and its salts*	Several
Trimethylanilines and its salts	Several	Benzidine	92-87-5
		Benzidine acetate	36341-27-2
2,4,5-Trimethylaniline and its salts	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
Arylamines (continued)		*Tetrachlorobenzenes, all isomers*	Several
Toluidines and its salts	Several	1,2,3,4-Tetrachlorobenzene	634-66-2
		1,2,3,5-Tetrachlorobenzene	634-90-2
4,4'-Methylenedi-o-toluidine and its salts	Several	1,2,4,5-Tetrachlorobenzene	95-94-3
4,4'-Methylenedi-o-toluidine	838-88-0	*Trichlorobenzenes, all isomers*	Several
m-Toluidine and its salts	Several	1,2,3-Trichlorobenzene	87-61-6
m-Toluidine	108-44-1	1,2,4-Trichlorobenzene	120-82-1
o-Toluidine and its salts	Several	1,3,5-Trichlorobenzene	108-70-3
o-Toluidine	95-53-4	*Dichlorobenzenes, all isomers*	Several
p-Cresidine and its salts	Several	1,2-Dichlorobenzene	95-50-1
p-Cresidine	120-71-8	1,3-Dichlorobenzene	541-73-1
p-Toluidine and its salts	Several	1,4-Dichlorobenzene	106-46-7
p-Toluidine	106-49-0	***Chlorinated Toluenes***	Several
Dianilines and its salts	Several	Chlorotoluene, unspecific mixture	25168-05-2
4,4'-Oxydianiline and its salts	Several	Pentachlorotoluene	877-11-2
4,4'-Oxydianiline	101-80-4	*Trichlorotoluenes, all isomers*	Several
4,4'-Thiodianiline and its salts	Several	2,3,4-Trichlorotoluene	7359-72-0
4,4'-Thiodianiline	139-65-1	2,3,6-Trichlorotoluene	2077-46-5
Chlorotoluidines and its salts	Several	2,4,5-Trichlorotoluene	6639-30-1
4-Chloro-2-toluidine and its salts	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
Biocides		*Dichlorotoluenes, all isomers*	Several
o-Phenylphenol and its salts	Several	2,3-Dichlorotoluene	32768-54-0
o-Phenylphenol	90-43-7	2,4-Dichlorotoluene	95-73-8
Chlorinated Benzenes and Toluenes		2,5-Dichlorotoluene	19398-61-9
Chlorinated Benzenes	Several	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	*Monochlorotoluenes, all isomers*	Several

Chemical Name	CAS Number	Chemical Name	CAS Number
Chlorinated Benzenes and Toluenes (continued)		3,4-Dichlorophenol	95-77-2
2-Chlorotoluene	95-49-8	3,5-Dichlorophenol	591-35-5
3-Chlorotoluene	108-41-8	*Monochlorophenols, all isomers*	25167-80-0
4-Chlorotoluene	106-43-4	2-Chlorophenol	95-57-8
Tetrachlorotoluenes, all isomers	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	**Colorants**	
2,3,5,6-Tetrachlorotoluene	1006-31-1	***Colorants banned for other reasons***	Several
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
Chlorinated Phenols		Basic Blue 26 - with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	2580-56-5
Tetrachlorophenol, its salts and compounds	25167-83-3		
2,3,4,5-Tetrachlorophenol	4901-51-3	Direct Black 91	6739-62-4
2,3,4,6-Tetrachlorophenol	58-90-2	Direct Blue 218	28407-37-6
2,3,5,6-Tetrachlorophenol	935-95-5	Direct Blue 76	16143-79-6
Trichlorophenol, all isomers	25167-82-2	Direct Yellow 1	6472-91-9
2,3,4-Trichlorophenol	15950-66-0	Disperse Orange 149	85136-74-9
2,3,5-Trichlorophenol	933-78-8	Disperse Yellow 23	6250-23-3
2,3,6-Trichlorophenol	933-75-5	*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*	Several
2,4,5-Trichlorophenol	95-95-4		
2,4,6-Trichlorophenol	88-06-2		
3,4,5-Trichlorophenol	609-19-8		
Pentachlorophenol, its salts, esters and compounds	Several	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
Pentachlorophenol	87-86-5		
Mono- and Dichlorophenols	Several		
Dichlorophenols, all isomers	25167-81-1	Trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)chromat	
2,3-Dichlorophenol	576-24-9		
2,4-Dichlorophenol	120-83-2	Basic Violet 1	8004-87-3
2,5-Dichlorophenol	583-78-8	Basic Violet 3 - with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)	548-62-9
2,6-Dichlorophenol	87-65-0		

Chemical Name	CAS Number	Chemical Name	CAS Number
Colorants (continued)		Disperse Orange 37/59/76 [3]	51811-42-8
Basic Violet 3 [1]	548-62-9	***Colorants with carcinogenic potential***	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
Colorants with allergenic potential	Several	Direct Black 38	1937-37-7
Disperse Blue 102	69766-79-6	Direct Blue 6	2602-46-2
Disperse Blue 106	12223-01-7	Direct Brown 95	16071-86-6
Disperse Blue 124	61951-51-7 15141-198-1	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 ≥ 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		
Disperse Yellow 1	119-15-3	*Basic Green 4*	Several
Disperse Yellow 39	12236-29-2	Leucomalachite green	129-73-7
Disperse Yellow 49	6858-49-7	Malachite green	10309-95-2
Disperse Yellow 9	6373-73-5	Malachite green chloride	569-64-2
Solvent Yellow 14	842-07-9	Malachite green oxalate	2437-29-8
Disperse Blue 35	Several	**Dioxins and Furans**	
Disperse Blue 35 [1]	12222-75-2	*Dioxins and Furans - Group 3*	Several
Disperse Blue 35 [2]	56524-77-7	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0
Disperse Blue 35 B	56524-76-6	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9
Disperse Orange 37/59/76	Several	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4
Disperse Orange 37/59/76 [1]	12223-33-5	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9
Disperse Orange 37/59/76 [2]	13301-61-6	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7

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

Chemical Name	CAS Number	Chemical Name	CAS Number
Flame retardants (continued)		**Isocyanates**	
β-Hexabromocyclododecane	134237-51-7	1,3-bis(isocyanatomethyl)benzene	3634-83-1
Chlorinated Paraffins, all chain lengths	Several	Hexamethylene-di-isocyanate	822-06-0
Paraffin wax, chlorinated	63449-39-8	Isophorone-di-isocyanate	4098-71-9
Paraffin, C10-C13, chlorinated	85535-84-8	Tetramethylxylene-di-isocyanate	2778-42-9
Paraffin, C14-C17, chlorinated	85535-85-9	***Diphenylmethane-di-isocyanates***	Several
Paraffin, C18-C28, chlorinated	85535-86-0	Diphenylmethane-2,2-di-isocyanate	2536-05-2
Polybrominated diphenyl ethers	Several	Diphenylmethane-2,4-di-isocyanate	5873-54-1
Decabromodiphenyl ether	1163-19-5	Diphenylmethane-4,4-di-isocyanate	101-68-8
Tetrabromodiphenyl ether	40088-47-9	Methylenediphenyl diisocyanate - mixed isomers	26447-40-5
2,2′,4,4′- Tetrabromodiphenyl ether	5436-43-1	***Toluene-di-isocyanates***	Several
Pentabromodiphenyl ether	32534-81-9	Toluene-2,4-di-isocyanate	584-84-9
Octabromodiphenyl ether	32536-52-0	Toluene-2,6-di-isocyanate	91-08-7
Nonabromodiphenyl ether	63936-56-1	**Pesticides**	
Hexabromodiphenyl ether	36483-60-0	Aldrin	309-00-2
2,2′,4,4′,5,5′- Hexabromodiphenyl ether	68631-49-2	Azinphos ethyl	2642-71-9
2,2′,4,4′,5,6′- Hexabromodiphenyl ether	207122-15-4	Azinphos methyl	86-50-0
Heptabromodiphenyl ether	68928-80-3	Bromophos-ethyl	4824-78-6
2,2',3,3',4,5',6- Heptabromodiphenyl ether	446255-22-7	Captafol	2425-06-1
2,2′,3,4,4′,5′,6- Heptabromodiphenyl ether	207122-16-5	Carbaryl	63-25-2
Monobromodiphenyl ether	Several	Chlordane	57-74-9
2-Bromodiphenyl ether	7025-06-1	Chlordecone	143-50-0
3-Bromodiphenyl ether	6876-00-2	Chlordimeform	6164-98-3
4-Bromodiphenyl ether	101-55-3	Chlorfenvinphos	470-90-6
Polybrominated diphenyl ethanes	Several	Chlorobenzilate	510-15-6
Decabromodiphenylethane	84852-53-9	Clothianidin	210880-92-5
Halogenated Diarylalkanes		Coumaphos	56-72-4
Monomethyl-dibromo-diphenyl methane	99688-47-8	Cyfluthrin	68359-37-5
Monomethyl-dichloro-diphenyl methane	81161-70-8	Cyhalothrin, lambda	91465-08-6
Monomethyl-tetrachloro-diphenyl methane	76253-60-6	Cypermethrin	52315-07-8

Chemical Name	CAS Number	Chemical Name	CAS Number
Pesticides (continued)		Monocrotophos	6923-22-4
Deltamethrin	52918-63-5	o,p'-Dichlorodiphenyl-dichloroethane	53-19-0
Diazinon	333-41-5	o,p'-Dichlorodiphenyl-dichloroethylene	3424-82-6
Dichlorprop	120-36-5	o,p'-Dichlorodiphenyl-trichloroethane and its isomers - preparations containing DDT and its isomers	789-02-6
Dicrotophos	141-66-2	p,p'-Dichlorodiphenyldichloroethane	72-54-8
Dieldrine	60-57-1		
Dimethoate	60-51-5	p,p'-Dichlorodiphenyl-dichloroethylene	72-55-9
Dinotefuran	165252-70-0	p,p'-Dichlorodiphenyl-trichloroethane and its isomers - preparations containing DDT and its isomers	50-29-3
Endosulfan, alpha	959-98-8	Perthane	72-56-0
Endosulfan, beta	33213-65-9	Phosphamidon	13171-21-6
Endrin	72-20-8	Profenophos	41198-08-7
Esfenvalerate	66230-04-4	Propetamphos	31218-83-4
Ethyl parathion	56-38-2	Quinalphos	13593-03-8
Fenvalerate	51630-58-1	Strobane	8001-50-1
Glyphosate	1071-83-6	Telodrin	297-78-9
Heptachlor	76-44-8	Thiamethoxam	153719-23-4
Heptachlor epoxide	1024-57-3	Tiacloprid	111988-49-9
Imidacloprid (ISO)	105827-78-9 138261-41-3	Toxaphene	8001-35-2
Heptachlor	76-44-8	Tribufos (DEF)	78-48-8
Isodrin	465-73-6	Trifluralin - containing < 0.5 ppm NPDA	1582-09-8
Kelevan	4234-79-1	***Hexachlorocyclohexane, all isomers***	608-73-1
Lindane (ISO)	58-89-9	***Acetamipirid, its salts, esters and compounds***	Several
Malathion	121-75-5	Acetamipirid (ISO)	135410-20-7
MCPA	94-74-6	Acetamipirid [2]	160430-64-8
MCPB	94-81-5	***Dinoseb, its salts, esters and acetate***	Several
Mecoprop	93-65-2	Dinoseb	88-85-7
Methamidophos	10265-92-6	***2,4-Dichlorophenoxyacetic acid, salts, esters and compounds***	Several

Chemical Name	CAS Number	Chemical Name	CAS Nu
Pesticides (continued)		Perfluoroheptanoic acid	375-85-9
2,4-Dichlorophenoxy acetic acid	94-75-7	***Perfluorooctanoic acid and its salts***	Several
Nitenpyram, its salts, esters and compounds	Several	Ammonium pentadecafluoro octanoate	3825-26-1
Nitenpyram [1]	150824-47-8	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
Nitenpyram [2]	120738-89-8	Perfluorooctanoic acid (PFOA)	335-67-1
2,4,5-Trichlorophenoxyacetic acid, its salts, esters and compounds	Several	Potassium perfluorooctanoate	2395-00-8
2,4,5-Trichlorophenoxy acetic acid	93-76-5	***Perfluorooctanoic acid related substances***	Several
PFAS (Poly- and perfluoroalkyl substances)		Methyl perfluorooctanoate	376-27-2
Perfluorooctane sulfonic acid and its derivatives	Several	Ethyl perfluorooctanoate	3108-24-5
Perfluorooctane sulphonic acid and its salts	Several	*Perfluorooctylethyl alcohols*	Several
Ammonium perfluorooctane sulfonate	29081-56-9	Perfluorooctylethanol	678-39-7
Diethanolamine perfluorooctane sulfonate	70225-14-8	*Perfluorooctylethyl olefins*	Several
Lithium perfluorooctane sulfonate	29457-72-5	Perfluorooctylethene	21652-58-4
Perfluorooctane sulfonate	45298-90-6	*Perfluorooctylethyl halides*	Several
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	1H,1H,2H,2H-Perfluorodecyliodide	2043-53-0
Potassium heptadecafluoro-octane-1-sulphonate	2795-39-3	Heptadecafluoro-1-iodooctane	507-63-1
Perfluorooctane sulfon amidoethanols	Several	Pentadecafluorooctyl fluoride	335-66-0
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	*Perfluorooctylethyl acrylate or methacrylate*	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	*Perfluorooctylethyl polymers*	Several
		Perfluorocarboxylic acids (C9-C14) related substances	Several
Heptadecafluoro-N-methyloctane sulfonamideoethanol	24448-09-7	*Perfluorodecanoic acid related substances*	Several
Perfluorooctane sulfon polymers	Several	10:2 Fluorotelomer alcohol - (10:2 FTOH)	865-86-1
Perfluorooctane sulfon halides	Several	**Plasticizers**	
1-Octanesulfonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-	307-35-7	***Phthalic acid esters***	Several
Perfluorooctane sulfon amides	Several	Bis-(2-methoxyethyl) phthalate - (DMEP)	117-82-8
Heptadecafluoro-N-methyloctane sulfonamide	31506-32-8	Butylbenzyl phthalate - (BBP)	85-68-7
Perfluorooctane sulfonamide	754-91-6	Dibutyl phthalate - (DBP)	84-74-2
Perfluorooctane sulfon amidoethyl (meth)acrylates	Several	Di-cyclohexyl phthalate - (DCHP)	84-61-7
Perfluorohexanoic acid and its salts	Several	Diethyl phthalate - (DEP)	84-66-2
Perfluorohexanoic acid (PFHxA)	307-24-4	Diethylhexyl phthalate - (DEHP)	117-81-7
Perfluoroheptanoic acid and its salts	Several	Di-iso-butyl phthalate - (DIBP)	84-69-5

Chemical Name	CAS Number
Plasticizers (continued)	
Di-iso-hexyl phthalate - (DIHxP)	71850-09-4
Di-iso-octyl phthalate - (DIOP)	27554-26-3
Di-iso-pentyl phthalate - (DIPP)	605-50-5
Dimethyl phthalate - (DMP)	131-11-3
Di-n-hexyl phthalate - (DnHP)	84-75-3
Di-n-octyl phthalate - (DnOP)	117-84-0
Dinonyl phthalate - (DNP)	84-76-4
Di-n-pentyl phthalate - (DnPP)	131-18-0
Di-n-propyl phthalate - (DPRP)	131-16-8
n-Pentyl-isopentyl phthalate	776297-69-9
1,2-Benzenedicarboxylic acid, benzyl C7-9-branched and linear alkyl esters	68515-40-2
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkylesters, C7- rich	71888-89-6
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkylesters	68515-42-4
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	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
Di-iso-nonyl phthalate - (DINP)	Several
Di-iso-nonyl phthalate - iso & n-Butene based	68515-48-0
Di-iso-decyl phthalate - (DIDP)	Several
Di-iso-decyl phthalate [1]	26761-40-0
Di-iso-decyl phthalate [2]	68515-49-1
Polyaromatic hydrocarbons (PAHs)	
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benzo(ghi)perylene	191-24-2
Benzo[rst]pentaphene	189-55-9
Dibenzo[b,def]chrysene	189-64-0
Dibenzo[def,p]chrysene	191-30-0
Cyclopenta[c,d]pyrene	27208-37-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno(1,2,3-cd) pyrene	193-39-5
Methylpyrene, 1-	2381-21-7
Naphthalene	91-20-3
Naphtho[1,2,3,4-def]chrysene	192-65-4
Phenanthrene	85-01-8
Pyrene	129-00-0

Chemical Name	CAS Number	Chemical Name	CAS Number
Tin-organic Compounds		***Hexyltin compounds***	Several
Methyltin compounds	Serveral	*Tricyclohexyltin compounds - (TCyHT)*	Several
Monomethyltin compounds - (MMT)	Several	Tricyclohexyltin chloride	3091-32-5
Methyltin trichloride	993-16-8	***Octyltin compounds***	Several
Dimethyltin compounds - (DMT)	Several	*Monooctyltin compounds - (MOT)*	Several
Dimethyltin dichloride	753-73-1	Monooctyltin trichloride	3091-25-6
Trimethyltin compounds - (TMT)	Several	*Dioctyltin compounds - (DOT)*	Several
Trimethyltin chloride	1066-45-1	Dioctyltin dihydride	15231-44-4
Ethyltin compounds	Several	Dichlorodioctyl stannane	3542-36-7
Tetraethyltin compounds - (TeET)	Several	*Trioctyltin compounds - (TOT)*	Several
Tetraethyltin	597-64-8	Trioctyltin chloride	2587-76-0
Propyltin compounds	Several	*Tetraoctyltin compounds - (TeOT)*	Several
Dipropyltin compounds - (DPT)	Several	Tetraoctyltin	3590-84-9
Dichlorodipropyltin	867-36-7	***Phenyltin compounds***	**Several**
Tripropyltin compounds - (TPT)	Several	*Monophenyltin compounds - (MPhT)*	Several
Tripropyltin chloride	2279-76-7	Monophenyltin trichloride	1124-19-2
Butyltin compounds	Several	*Diphenyltin compounds - (DPhT)*	Several
Monobutyltin compounds - (MBT)	Several	Diphenyltin dichloride	1135-99-5
N-butyltin trichloride	1118-46-3	*Triphenyltin compounds - (TPhT)*	Several
Dibutyltin compounds - (DBT)	Several	Triphenyltin	668-34-8
Dibutyltin	1002-53-5	Triphenyltin chloride	639-58-7
Dibutyltin oxide	818-08-6		
Dibutyltin maleate	78-04-6		
Tributyltin compounds - (TBT)	Several		
Tin-San - A tributyltin chloride complex	56573-85-4		
Tributyltin chloride	1461-22-9		
Tetrabutyltin compounds - (TeBT)	Several		
Tetrabutyltin	1461-25-2		

Appendix 1c: Product Testing Matrix

	Natural Fibers	Synthetic Fibers	Natural Leather	Natural materials	Metal	Feather & Down	Polymers & Plastics	Coatings & Prints	Glue
Acetophenone & 2-Phenyl-2-Propanol							x[1]		
Acidic and alkaline substances (pH)	x	x	x						
Alkylphenol (AP) & Alkylphenol Ethoxylates (APEOs)	x	x	x	x		x	x	x	x
Azo-amines and Arylamine salts	x	x	x	x		x		x	
Bisphenols		x	x				x[2]		
Chlorinated Paraffins		o[3]	x				x[3]	-	
Chlorophenols	o	o	o						
Chlorinated Benzenes and Toluenes		o							
Dimethylfumarate (DMFu)			o						
Dyes, Forbidden & Disperse		x						o	
Flame Retardants					x[4]				
Formaldehyde	x	x	x				o[5]	x	x
Heavy Metals, Chromium VI	o[6]		x						
Heavy Metals, Extractable	x	x	x				o	o	
Heavy metals, Nickel Release (Ni)					x[7]				
Heavy metals, total	o[8]		o		x		x[9]	x	o
N-Nitrosamine							o[5]		
Isocyanates							o[10]	o[10]	
Organotin Compounds		o	o				x	x	x
Ortho-Phenylphenol (OPP)	o	o	o					o	
Per- and polyfluoroalkyl substances (PFAS)					x[11]				

[1] Only applicable to EVA foam
[2] Polycarbonate
[3] PU, TPU, rubber and PVC
[4] Contains fire retardant finish
[5] Only applicable to rubber material
[6] Wool only
[7] Direct and prolonged contact with the skin
[8] Plant based fibers only
[9] Core testing for foams only
[10] Only applicable to Polyurethane material
[11] If PFAS use or contamination is suspected

	Natural Fibers	Synthetic Fibers	Natural Leather	Natural materials	Metal	Feather & Down	Polymers & Plastics	Coatings & Prints	Glue
Phthalates							x	x	x
Polycyclic Aromatic Hydrocarbons (PAHs)							x[12]	x	x
Quinoline		o							
Solvents / Residuals (Formamide)							o[13]		
Solvents / Residuals DMFa		x[14]					x[14]	x[14]	x[14]
Solvents / Residuals DMAc, NMP							o	o	o
UV Stabilizers / Inhibitors							o		
Vinyl Chloride Monomer							x[15]	x[15]	
Volatile Organic Compounds (VOCs)							o	o	x

x Core Testing o Additional testing

[12] Rubber o black polymeric materials
[13] Core for Formamide in EVA only
[14] Core for PU and PVC only
[15] Only applicable to PVC

Appendix 2a: Packaging Restricted Substances List (RSL)

- An interactive version of the AFIRM packaging RSL v07 which includes information sheets on different materials groups can be found at the below link: AFIRM Packaging Restricted Substances List (afirm-group.com)
- Versions in Chinese, Indonesian, Japanese, Spanish and Vietnamese are also available on the AFIRM website.

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Alkylphenols (APs) and Alkylphenol Ethoxylates (APEOs), including all isomers					
Various	Nonylphenol (NP), mixed isomers	Total: 100 ppm	APEOS are used as surfactants in the production of plastics, elastomers, paper, and textiles. These chemicals can be found in many processes involving foaming, emulsification, solubilization, or dispersion. APEOs can be used in paper pulping, lubrication oils, and plastic polymer stabilization. APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers. Biodegradation of APEOs into APs is the main source of APs in the environment. APEOs and formulations containing APEOs are prohibited from use throughout supply chain and manufacturing processes. We acknowledge that residual or trace concentrations of APEOs may still be found at levels exceeding 100 ppm and that more time is necessary for the supply chain to phase them out completely.	Textiles and Leather: EN ISO 21084:2019 Polymers and all other materials: 1 g sample/20 mL THF, sonication for 60 minutes at 70 degrees C, analysis according to EN ISO 21084:2019	Sum of NP & OP: 3 ppm
Various	Octylphenol (OP), mixed isomers				
Various	Nonylphenol ethoxylates (NPEOs)	Total: 100 ppm		All materials except Leather: EN ISO 18254-1:2016 with determination of APEO using LC/MS or LC/MS/MS Leather: Sample prep and analysis using EN ISO 18218-1:2015 with quantification according to EN ISO 18254-1:2016	Sum of NPEO & OPEO: 20 ppm
Various	Octylphenol ethoxylates (OPEOs)				

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Azo-amines + and Arylamine Salts					
92-67-1	4-Aminobiphenyl	20 ppm each	Azo dyes and pigments are colorants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those which degrade to form the listed cleavable amines are restricted. Azo dyes that release these amines are regulated and should no longer be used for dyeing textiles.	All materials except Leather: EN ISO 14362-1:2017 Leather: EN ISO 17234-1:2020 p-Aminoazobenzene: All materials except Leather: EN ISO 14362-3:2017 Leather: EN ISO 17234-2:2011	5 ppm each
92-87-5	Benzidine				
95-69-2	4-Chloro-o-toluidine				
91-59-8	2-Naphthylamine				
97-56-3	o-Aminoazotoluene				
99-55-8	2-Amino-4-nitrotoluene				
106-47-8	p-Chloraniline				
615-05-4	2,4-Diaminoanisole				
101-77-9	4,4'-Diaminodiphenylmethane				
91-94-1	3,3'-Dichlorobenzidine				
119-90-4	3,3'-Dimethoxybenzidine				
119-93-7	3,3'-Dimethylbenzidine				
838-88-0	3,3'-dimethyl-4,4'-Diaminodiphenylmethane				
120-71-8	p-Cresidine				
101-14-4	4,4'-Methylen-bis(2-chloraniline)				
101-80-4	4,4'-Oxydianiline				
139-65-1	4,4'-Thiodianiline				
95-53-4	o-Toluidine				
95-80-7	2,4-Toluenediamine				
137-17-7	2,4,5-Trimethylaniline				
95-68-1	2,4 Xylidine				
87-62-7	2,6 Xylidine				
90-04-0	2-Methoxyaniline (= o-Anisidine)				
60-09-3	p-Aminoazobenzene				
3165-93-3	4-Chloro-o-toluidinium chloride				
553-00-4	2-Naphthylammoniumacetate				
39156-41-7	4-Methoxy-m-phenylene diammonium sulphate				
21436-97-5	2,4,5-Trimethylaniline hydrochloride				

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Bisphenols					
80-05-7	Bisphenol-A (BPA)	Receipt paper: BPA: 1 ppm Other packaging: 1000 ppm each In preparation for forthcoming restrictions, significantly lower levels of bisphenols should be achievable, e.g., in polyamide, over time or better alternatives should be substituted if possible.	BPA may be used in the production of epoxy resins, polycarbonate plastics, flame retardants, and PVC. BPS may be used as a substitute for BPA for some specific uses, including in thermal receipt paper. BPS and BPF can be found in polyamide dye-fixing agents and in sulfone- and phenol- based leather synthetic tanning agents. BPA and BPS can be found in recycled polymeric and paper materials due to polycarbonate plastic and thermal receipt paper made with bisphenols entering waste streams. BPA, BPS, and BPB are included on the REACH SVHC list. Additional restrictions on the entire class of bisphenols are expected, with a revised restriction proposal forthcoming in the European Union.	Leather: EN ISO 11936:2023 All other materials: Extraction: 1 g sample/20 ml THF, sonication for 60 minutes at 60° C, analysis with LC/MS Note for textiles: For precipitation, draw the extract to another container and add methanol or acetonitrile. This keeps the extraction process consistent.	Leather: 10 ppm each All other materials: 0.1 ppm for individual samples 1 ppm for composite samples
80-09-1	Bisphenol-S (BPF)				
77-40-7	Bisphenol-B (BPB)				
620-92-8	Bisphenol-F (BPS)				
Butylated Hydroxytoluene (BHT)					
128-37-0	Dibutylhydroxytoluene (BHT) .	25 ppm	Used as an additive in plastics as an antioxidant to prevent aging. Can cause phenolic yellowing of textiles	ASTM D4275:2017	5 ppm
Dimethylfumarate					
624-49-7	Dimethylfumarate (DMFu)	0.1 ppm	DMFu is an anti-mold agent used in sachets in packaging to prevent the buildup of mold, especially during shipping.	All materials: ISO 16186:2021	0.05 ppm

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Flame retardants					
1163-19-5	Decabromodiphenyl ether (DecaBDE)	Total: 500 ppm	Flame retardant substances, including the entire class of organohalogen flame retardants, should no longer be applied to packaging materials during production. Listed here are relevant flame retardants included in the Stockholm Convention. These substances should not be used for any other purpose, e.g., as plasticizers or softeners. Impurities found may come from electronic waste recycling streams, e.g., polystyrene, and can impede future recycling opportunities.	All materials: EN ISO 17881-1:2016	5 ppm each
32534-81-9	Pentabromodiphenyl ether (PentaBDE)				
3194-55-6	Hexabromocyclododecane (HBCDD)				
79-94-7	Tetrabromobisphenol A (TBBP A)				
40088-47-9	Tetrabromodiphenyl ether				
36483-60-0	Hexabromodiphenyl ether				
68928-80-3	Heptabromodiphenyl ether				
Formaldehyde					
50-00-0	Formaldehyde	150 ppm	Formaldehyde can be found in polymeric resins, binders, and fixing agents for dyes and pigments, including those with fluorescent effects. It is also used as a catalyst in certain printing, adhesives, and heat transfers. Formaldehyde can be used in antimicrobial applications for odor control. Formaldehyde found in packaging can off-gas directly onto product. Composite wood materials (e.g., particle board and plywood) must comply with California and U.S. formaldehyde emission requirements (40 CFR 770). Though formaldehyde legislation does not specifically apply to packaging, suppliers are advised to refer to brand-specific requirements for these materials.	Wood: EN 717-3:1996 Paper: DIN EN 645:1994 and EN 1541:2001 Textiles, Finishings, Dyes, Inks & Coatings: JIS L 1041-2011 A (Japan Law 112) or EN ISO 14184-1:2011 Leather: EN ISO 17226-2:2019 with EN ISO 17226-1:2021 confirmation method in case of interferences. Alternatively, EN ISO 17226-1:2021 can be used on its own.	16 ppm

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Heavy Metals (Total Content)					
7440-43-9	Cadmium (Cd)	100 ppm (Sum)	Cadmium compounds are used as pigments (especially in red, orange, yellow and green) and in paints. It can also be used as a stabilizer for PVC.	All materials: Total heavy metals (Cd, Cr, Pb & Hg): EN ISO 16711-1:2016 If total of four heavy metals exceeds 100 ppm and Cr is detected, test for CrVI.	5 ppm
7439-92-1	Lead (Pb)		May be associated with plastics, paints, inks, pigments, and surface coatings.		10 ppm
7439-97-6	Mercury (Hg)		Mercury compounds can be present in pesticides and as contaminants in caustic soda (NaOH). They may also be used in paints.		5 ppm
18540-29-9	Chromium VI		Though typically associated with leather tanning, Chromium VI also may be used in pigments, chrome plating of metals, and wood preservatives.	Metal: IEC 62321-7-1:2015 All other materials: IEC 62321-7- 2:2015.	3 ppm

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Organotin Compounds					
Various	Tributyltin (TBT)	0.5 ppm each	Class of chemicals combining tin and organics such as butyl and phenyl groups. Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g., antibacterials), catalysts in plastic and glue production, and heat stabilizers in plastics/rubber. In textiles and apparel packaging, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.	All materials: CEN ISO/TS 16179:2012 or EN ISO 22744-1:2020	0.1 ppm each
Various	Triphenyltin (TPhT)				
Various	Dibutyltin (DBT)	1 ppm each			
Various	Dioctyltin (DOT)				
Various	Monobutyltin (MBT)				
Various	Monooctyltin (MOT)				
Various	Tricyclohexyltin (TCyHT)				
Various	Trimethyltin (TMT)				
Various	Trioctyltin (TOT)				
Various	Tripropyltin (TPT)				
Various	Dimethyltin (DMT)	Other Organotins: 1 ppm each			
Various	Diphenyltin (DPhT)				
Various	Dipropyltin (DPT)				
Various	Monomethyltin (MMT)				
Various	Monophenyltin (MPhT)				
1461-25-2	Tetrabutyltin (TeBT)				
597-64-8	Tetraethyltin (TeET)				
3590-84-9	Tetraoctyltin (TeOT)				

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Per- and polyfluoroalkyl substances (PFAS)					
Various	All PFAS as measured by total organic fluorine	100 ppm by 2025 50 ppm by 2027	Regulations around the world ban the use of PFAS in packaging. PFAS may be used in commercial water-, oil-, and stain-repellent agents as well as in breathable membranes that remove moisture, e.g., PTFE. Refer to Appendix 2b for a list of PFAS substances and CAS Numbers for which testing can be conducted to indicate whether PFAS chemistry is present above restricted levels due to intended use or unintended contamination.	EN 14582:2016 or ASTM D7359:2023	50 ppm total
Various	Perfluorooctane Sulfonate (PFOS) and related substances	1000 ppb total		All materials: EN 17681-1 (2025)	1 µg/m2 total
Various	Perfluorooctanoic Acid (PFOA) and its salts	25 ppb total			25 ppb total
Various	PFOA-related substances	1000 ppb total			1000 ppb total
Various	Perfluorohexane-1-sulphonic acid (PFHxS) and its salts	25 ppb total			25 ppb total
Various	PFHxS-related substances	1000 ppb total			1000 ppb total
Various	C9-C14 Perfluorocarboxylic acids (PFCAs) and their salts	25 ppb total			25 ppb total
Various	C9-C14 PFCA-related substances	260 ppb total			260 ppb total
Various	PFHxA, its salts, and related substances	Anticipated regulated limits in the EU: PFHxA and its salts: 25 ppb PFHxA-related substances: 1000 ppb			PFHxA and its salts: 25 ppb PFHxA-related substances: 1000 ppb

CAS Number	**Chemical Name**	Limits	Potential Uses	**Sample Preparation**	Reporting Limit
Phthalates					
28553-12-0	Di-Iso-nonylphthalate (DINP)	500 ppm each Total: 1000 ppm	Esters of ortho-phthalic acid (Phthalates) are a class of organic compound commonly added to plastics to increase flexibility. They are sometimes used to facilitate the moulding of plastic by decreasing its melting temperature. Phthalates can be found in: • Flexible plastic packagingComponents (e.g., PVC) • Plastisol print pastes • Adhesives • Plastic sleeves • Polymeric coatings The REACH substances of very high concern (SVHC) candidate list is updated frequently. Suppliers should assume that the AFIRM Packaging RSL includes all Phthalates on the SVHC list—whether itemized here or not.	All materials: CPSC-CH-C1001-09.4, analysis by GC/MS	50 ppm each
117-84-0	Di-n-octylphthalate (DNOP)				
117-81-7	Di(2-ethylhexyl)-phthalate (DEHP)				
26761-40-0	Diisodecylphthalate (DIDP)				
85-68-7	Butylbenzylphthalate (BBP)				
84-74-2	Dibutylphthalate (DBP)				
84-69-5	Diisobutylphthalate (DIBP)				
84-75-3	Di-n-hexylphthalate (DnHP)				
84-66-2	Diethylphthalate (DEP)				
131-11-3	Dimethylphthalate (DMP)				
131-18-0	Di-n-pentyl phthalate (DPENP)				
84-61-7	Dicyclohexyl phthalate (DCHP)				
71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich				
117-82-8	Bis(2-methoxyethyl) phthalate				
605-50-5	Diisopentyl phthalate (DIPP)				
131-16-8	Dipropyl phthalate (DPRP)				
27554-26-3	Diisooctyl phthalate (DIOP)				
68515-50-4	Diisohexyl phthalate (DIHP)				
71850-09-4	Diisohexyl phthalate (DIHxP)				
68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)				
84777-06-0	1,2-Benzenedicarboxylic acid Dipentyl ester,branched and linear				
68648-93-1	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate; 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters; 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters				
68515-51-5					
776297-69-9	n-Pentyl-isopentylphthalate (nPIPP)				
26040-51-7	Bis(2-ethylhexyl) tetrabromophthalate				

Appendix 2b: Per- and polyfluoroalkyl substances (PFAS)

CAS Number	Chemical Name	CAS Number	Chemical Name
	PFOS and Related Substances		**PFHxS and Its Salt**
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	355-46-4	Perfluorohexane Sulfonic acid (PFHxS)
2795-39-3	Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	3871-99-6	Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)
29457-72-5	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	55120-77-9	Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)
29081-56-9	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH_4)	68259-08-5	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH_4)
70225-14-8	Perfluorooctane sulfonate diethanolamine salt (PFOS-$NH(OH)_2$)	82382-12-5	Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na
56773-42-3	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-$N(C_2H5)_4$		**PFHxS-related Substances**
251099-16-8	Didecyldimethyl ammonium perfluorooctane sulfonate (PFOS-$N(C_{10}H_{21})_2(CH_3)_2$)		
4151-50-2	N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	68259-15-4	N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)
31506-32-8	N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	41997-13-1	Perfluorohexane sulfonamide (PFHxSA)
1691-99-2	2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)		**C9 – C14 PFCAs and Their Salts**
24448-09-7	2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)		
307-35-7	Perfluoro-1-octanesulfonyl fluoride (POSF)	375-95-1	Perfluorononanoic Acid (PFNA, C9-PFCA)
754-91-6	Perfluorooctane sulfonamide (PFOSA)	335-76-2	Perfluorodecanoic Acid (PFDA, C10-PFCA)
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	2058-94-8	Perfluoroundecanoic Acid (PFUnA, C11-PFCA)
	PFOA and Its Salts	307-55-1	Perfluorododecanoic Acid (PFDoA, C12-PFCA)
		72629-94-8	Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)
335-67-1	Perfluorooctanoic acid (PFOA)	376-06-7	Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)
335-95-5	Sodium perfluorooctanoate (PFOA-Na)	172155-07-6	Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA
2395-00-8	Potassium perfluorooctanoate (PFOA-K)		**C9 – C14 PFCA-related Substances**
335-93-3	Silver perfluorooctanoate (PFOA-Ag)		
335-66-0	Perfluorooctanoyl fluoride (PFOA-F)	17741-60-5	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)	2144-54-9	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)
	PFOA-related Substances	865-86-1	1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)
		34598-33-9	2H,2H,3H,3H-Perufloroundecanoic acid (H4PFUnA)
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	678-39-7	Perfluorocylethanol 8:2 (8:2 FTOH)
376-27-2	Methyl perfluorooctanoate (Me-PFOA)	39239-77-5	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)
3108-24-5	Ethyl perfluorooctanoate (Et-PFOA)	120226-60-0	1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)
678-39-7	Perfluorocylethanol 8:2 (8:2 FTOH)	2043-54-1	1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)
27905-45-9	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	30046-31-2	1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)
1996-88-9	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)		**Other Perfluoroalkyl Carboxylic Acids (PFCAs)**
27854-31-5	2H,2H-Perfluorodecanoic acid (H2PFDA)		
647-42-7	1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	307-24-4	Perfluorohexanoic Acid (PFHxA, C6-PFCA)

Appendix 2c: Packaging Testing Matrix

	Wood & Paper	Plastic & Wraps	Finishing, Dyes, inks & Coatings	Metal	Textiles	Other Items
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)	x	x	x		x	x[16]
Azo-amines and Arylamine Salts	x				x	
Bisphenols	x[17]	x[18]	o[19]		x	
Butylhydroxytoluene (BHT)		o[20]				
Dimethylfumarate (DMFu)						o[21]
Flame Retardants		o[22]				
Formaldehyde	x		x		o	
Heavy Metals (Cd, CrVI, Pb, Hg)#	o[22]	o[19]	o	o		
Organotin Compounds		x	x			
Per- and polyfluoroalkyl substances (PFAS)	**Prohibited**					
Phthalates		x	x[23]			

x Core Testing o Additional testing

note that Chromium VI, Cadmium, Lead, and Mercury are restricted to a sum total of 100 ppm in several jurisdictions. Cadmium, Lead, and Mercury are analyzed using the same method even if the risk of finding them varies across different materials.

[16] Foams only
[17] Thermal receipt and recycled paper
[18] Tapes, polycarbonate, and recycled plastic cases
[19] PVC
[20] Poly bags
[21] Silica gel packets and foam packaging
[22] High recycled content
[23] Plastisol prints

Appendix 2d: Packaging material categories

Examples of materials in each category

Paper & Wood	• Shoe boxes • Corrugated shipping boxes/cartons	• Tissue paper • Hang tags	• Thermal receipt paper
Plastic & Wrap Finishing	• Poly bags • Stickers	• Boxes or cases • Tape	• Stuffing materials, expanded foam materials
Dyes, Inks & Coatings	• Cellulose laminates • Coatings containing heavy metals • Hot stamp printing	• Foil stamping • Soft-touch coatings • Lamination, matte or gloss	• UV coatings • Varnish coatings • Water-based (aqueous) lacquer coatings
Metal	• Magnets • Eyelets	• Bead chain • Pins	• Zippers
Textiles	• Synthetic textiles	• Plant-based textiles	• Natural fibers (e.g. silk. Wool)
Other Items	• Silica gel/desiccant sachets	• Antimicrobial stickers	

Appendix 3: Definitions

Accessory
A component of a consumer product which is not classified as textile fabric (e.g. button, label, zipper, etc.)

Article
An object which during production is given a special shape, surface or design, which determines its function to a greater degree than does its chemical composition (fibers, textile fabrics, buttons, zippers, etc.).

BSSL
bluesign® system substances list (BSSL) consumer safety limits. A list that specifies consumer safety limits for chemical substances in articles. It also defines usage bans for chemical substances prohibited from the manufacturing of articles.

CAS
CAS registry numbers are unique numerical identifiers for chemical elements, compounds, polymers, biological sequences, mixtures and alloys. Chemical Abstracts Service (CAS), a division of the American Chemical Society, assigns these identifiers to every chemical that has been described in the literature. The intention is to make database searches more convenient, as chemicals often have many names. Almost all molecule databases today allow searching by CAS number.

Chemical substance
A chemical element and its compounds with constant composition and properties. It is defined by the CAS number.

Component
A part of an article that can be distinguished according to the material composition, the functionality and/or the color and is easily, mechanically separated from the other components.

Limit value
Limit values are defined for single substances or substance groups. The limit value is the maximum amount of a chemical substance or substance group permitted in articles for the usage ranges A, B and C.

Member
This term describes a member of a group of restricted substances. It can be a chemical substance or a subgroup of substances. See also Substance groups.

Mixture
A chemical product composed of two or more substances. It can be, for example, a colorant or an auxiliary.

Monitoring

For some chemical substances toxicological and/or ecological properties are not yet well defined. Therefore, the risk assessment is not complete. For some substances sufficient information on possible/typical contamination of articles and chemical products is not available now. Those substances are under observation. Exact restrictions will be defined as soon as more information exists. In cases where monitoring status is accompanied by a limit value, the limit value should be the goal.

Reporting limits

Reporting limits are values at or above the practical quantification limit (PQL) for the test method. The PQL represents the lowest level at which accurate, precise, and robust data can be reported. These limits are values above which labs should report detected substances for purposes of data capture and harmonization.

Sector of Use

Bluesign® ASSESSMENT for chemical products defines sector of use categories. BLUESIGN uses an approach similar to REACH for the risk-based evaluation of chemical substances and transfers this to the evaluation of chemical products. This allows a product, process and industry specific assessment of risks to human and the environment, that can be adapted to all kind of industries. Some sectors of use are combined to groups as shown in the following table:

Sector of Use Group	Sector of Use
Textiles	Fibers/yarns
	Textile articles including fabrics, laminates and non-wovens
	Garments and other finished textile articles
Down/feather	Down and feather articles
Leather	Leather articles
Polymer parts	Plastic articles
	Rubber articles
Metal parts	Basic metals, including alloys
	Fabricated metal articles

Several

When a substance group is not defined by a single CAS number, the field CAS Number contains the entry “Several”. In case of a restriction of the whole substance group this is reflected by a limit entry for the group or a corresponding comment. For substance groups, especially for large groups, some or all members are listed in the annex. When group members are listed in the annex, this is indicated in the comment for the group.

Substance groups

For better readability and to show the hierarchy of substance groups the RSL lists:

- Main substance group (**bold**, **normal letter**)
- Substance group ***(bold, italic letter)***
- Substance subgroup (*italic letter*)
- Single substances (normal letter)

Usage ban

For several chemical substances or substance groups a usage ban is defined. For these substances or substance groups intentional use in manufacturing of articles is prohibited. That means that chemical products (e.g. colorants or textile auxiliaries) used for manufacturing of articles must not intentionally contain these substances or substance groups. The aim of a usage ban is to avoid release of harmful substances to the environment and to avoid occurrence in the manufactured article by applying the precautionary principle.

Usage range

Usage ranges 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/bans:

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