



WESTWING

# Furniture and Decorative Articles

Restricted Substances List March 2023

## Restricted Substances List (RSL)

### Chemical Compounds and Substances for Furniture and Decorative Articles

This requirement document describes WESTWING bans and restrictions on certain chemical compounds and substances due to national or international regulations and/or health and environmental concerns defined by WESTWING.

The purpose of WESTWING requirements concerning chemical substances in WESTWING products is to:

- minimize harmful effects to customers' health and to the environment from WESTWING products.
- ensure compliance of WESTWING products with health and environmental regulations in all WESTWING markets.

Unless otherwise stated, the requirements are valid for each separate homogeneous material in the product.

This document will be updated regularly.

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
Formaldehyde	Formaldehyde content	Formaldehyde	50-00-0	Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins. Sources: Easy care treatment, cross-linking agent, preservatives, fix agents, adhesives & glues.	All materials except leather: EN ISO 14184-1 (ISO 14184-1) (When there is color interference by using UV-Vis method, HPLC further checking is required)  Leather: EN ISO 17226-1/-2 (ISO 17226-1/-2)	EU REACH ANNEX XVII Entry 72 CMR Substances  By way of derogation, in relation to the placing on the market of formaldehyde [CAS No 50-00-0] in jackets, coats or upholstery, the relevant concentration for the purposes of paragraph 1 shall be 300 mg/kg during the period between 1 November 2020 and 1 November 2023.  Baby (<=36 months): 16 mg/kg. Non baby: - direct skin contact: 75 mg/kg, - without direct skin contact: 300 mg/kg.
	Formaldehyde release	Formaldehyde	50-00-0	Found in resins used in the manufacture of composite wood products; in glues and adhesives.	Coated or uncoated wood-based materials: DIN EN 16516 or alternative: CARB2 certificate (Note: only CARB2 test report is not accepted)	German Chemicals Prohibition Ordinance (ChemVerbotsV), Appendix 1 0.1 mL/m3 (0.1 ppm)

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
Acidic and Alkaline Substances	pH value	—		To avoid irritation or chemical burns to the skin, the pH value of products must be in the range of human skin— approximately pH 5.5.  Usually for white or uncoloured textile, pH is 4.0-5.5 to avoid yellowing.	Textile and artificial leather: EN ISO 3071 (ISO 3071) Leather: EN ISO 4045 (ISO 4045)	No legal requirement in EU incl. Switzerland  Baby (<=36 months): 4.0 - 7.5. Non baby: - Direct skin contact: 4.0 - 7.5, - Without direct skin contact: 4.0 - 9.0, - Decoration material (non-leather): 4.0 - 9.0, - Leather: 3.5 - 7.5.
Organotin Compounds	Tributyltin (TBT)	various	X	Organotins can be used as biocides (e.g., antibacterials), catalysts in plastic and glue production, and heat stabilizers in plastics/rubber.  In textiles and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.	Acid digestion, ICP-OES for Tin screening  If Tin > 0.1%, CEN ISO/TS 16179 (ISO/TS 16179) or Solvent Extraction, GC-MS Analysis for further confirmation	EU REACH ANNEX XVII Entry 20  Sum of TBT, TPHT, TMT,TOT,TCyHT: 0.1% (1000 mg/kg) by weight of Tin; DBT & DOT Each: 0.1% (1000 mg/kg) by weight of Tin
	Triphenyltin (TPHT)	various				
	Trimethyltin (TMT)	various				
	Trioctyltin (TOT)	various				
	Tricyclohexyltin (TCyHT)	various				
	Dibutyltin (DBT)	various	X			
	Diocetyl tin (DOT)	various	X			
AZO Dyes and Arylamine Salts	4-Amino azobenzene	60-09-3	X	Azo dyes and pigments are colorants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds, can be found in disperse dye, reactive dye, direct dye, acid dye etc.  Thousands of azo dyes exist, but only those which degrade to form the listed cleavable amines are restricted.	All materials except Leather: EN ISO 14362-1 Leather: EN ISO 17234-1 (harmonised version)  p-Aminoazobenzene: All materials except Leather: EN ISO 14362-3 Leather: EN ISO 17234-2 (harmonised version)	EU REACH ANNEX XVII Entry 43 #EU REACH ANNEX XVII Entry 72 CMR Substances  each 30 mg/kg of 22 azo dyes & related salts  *Westwing requirement: textile/leather/paint/print/coating/feather/down/wood/paper/natural straw [Excl white color] of prod`ts shall have <= 20 mg/kg of 24 azo dyes & 4 related salts.
	o-Aminoazotoluene	97-56-3	X			
	4-Aminodiphenyl	92-67-1	X			
	2-Amino-4-nitrotoluene	99-55-8				
	o-Anisidine	90-04-0	X			
	Benzidine	92-87-5				
	p-Chloroaniline	106-47-8				
	4-Chloro- o -toluidine	95-69-2				
	p-Cresidine	120-71-8	X			
	2,4-Diaminoanisole	615-05-4				
	4,4'-Diaminodiphenylmethane	101-77-9	X			
	3,3'-Dichlorobenzidine	91-94-1				
	3,3'-Dimethoxybenzidine	119-90-4				
	3,3'-Dimethylbenzidine	119-93-7				
	3,3'-Dimethyl-4,4'-diamino-diphenylmethane	838-88-0	X			
	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	X			
	2-Naphthylamine	91-59-8				
	4,4'-Oxydianiline	101-80-4	X			
	4,4'-Thiodianiline	139-65-1				
	2,4-Toluenediamine	95-80-7	X			
	o-Toluidine	95-53-4	X			
	2,4,5-Trimethylaniline	137-17-7				
	2,4-Xylidine *	95-68-1				
2,6-Xylidine *	87-62-7					
4-Chloro-o-toluidinium chloride #	3165-93-3					
2-Naphthylammoniumacetate #	553-00-4					
4-Methoxy-m-phenylene diammonium sulphate #	39156-41-7					
2,4,5-Trimethylaniline hydrochloride #	21436-97-5					

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value	
Heavy Metals	Total Heavy Metals	Cadmium (Cd) and its compounds	—	X	Cadmium compounds may be used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides, and paints.	Acid Digestion Method, ICP-OES	EU REACH ANNEX XVII Entry 23  Paints on painted article: 1000 mg/kg (0.1%), Other plastic material: 100 mg/kg (0.01%), Metal part in jewelry: 100 mg/kg (0.01%), (expressed as Cd metal).
		Lead (Pb) and its compounds	—	X	May be associated with alloys, plastics, paints, inks, pigments and surface coatings.	Acid Digestion Method, ICP-OES  If the content of total Pb >= 500 mg/kg, additional testing for Pb release will be conducted according to EN 16711-3 (and EN 12472) for applicable condition.	EU REACH ANNEX XVII Entry 63  500 mg/kg (0.05%) for jewelry product; 500 mg/kg (0.05%) or lead release <= 0.05 µg/cm <sup>2</sup> /h ( for articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children. (expressed as Pb metal).
		Phenylmercury compounds	—		Used as catalysts in polyurethane systems used for coatings, adhesives, sealants and elastomer; could be incorporated into the polymer structure and remain in the final article.	Acid Digestion Method, ICP-OES	EU REACH ANNEX XVII Entry 62 0.01% (100 mg/kg) (expressed as Hg metal).
Extractable Heavy Metals		Cadmium (Cd) and its compounds	—	X	Cadmium compounds may be used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides, and paints.	EN 16711-2	EU REACH ANNEX XVII Entry 72 CMR Substances each 1 mg/kg (expressed as metal)
		Arsenic (As) compounds	—	X	Arsenic and its compounds can be used in preservatives, pesticides, and defoliant for cotton, synthetic fibers, paints, inks, trims, and plastics.		
		Lead (Pb) and its compounds	—	X	May be associated with alloys, plastics, paints, inks, pigments and surface coatings.		
		Chromium VI (Cr VI) compounds	—	X	Chromium VI may be used in the "after-chroming" process for wool dyeing (Chrome salts applied to acid-dyed wool to improve fastness).	EN 16711-2, EN ISO 17075-1/-2 (ISO 17075-1/-2) for Cr VI confirmation	

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
Chromium VI	Chromium VI (Cr VI) compounds	—	X	Though typically associated with leather tanning.	EN ISO 17075-1/-2 (ISO 17075-1/-2) Aging test: EN ISO 10195 (ISO 10195) Method A2	EU REACH ANNEX XVII Entry 47 Leather article/part coming into contact with skin: 3 mg/kg (0.0003%)(expressed as Cr VI metal).
	Nickel Release	Nickel (Ni) release	—	Nickel and its compounds can be used for plating alloys and improving corrosion-resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.	EN 1811 (and EN 12472)(harmonised version)	EU REACH ANNEX XVII Entry 27 Prolonged skin contact: 0.5 µg/cm <sup>2</sup> /week
	Toxic Elements in Packaging Components	Pb+Cd+Hg+Cr VI	—	X	—	Acid Digestions followed by ICP/AAS Analysis, UV- Visible Spectrometer
Chlorinated Paraffins	Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	85535-84-8 and others	X	Can be used as softeners, flame retardants, or fat-liquoring agents in leather production; also as a plasticizer in polymer production.	All materials except leather: EN ISO 22818 (ISO 22818); Leather: EN ISO 18219-1 (ISO 18219-1); Or Solvent Extraction, GC-MS Analysis	POP's regulation (EU) 2019/1021 1500 mg/kg (0.15%) for articles; 10000 mg/kg (1%) for mixtures;
Chlorophenols	Pentachlorophenol (PCP)	87-86-5		Chlorophenols are polychlorinated compounds used as preservatives or pesticides. PCP can also be used as in-can preservatives in print pastes and other chemical mixtures.	§ 64 LFGB B 82.02-08 (BVL B 82.02-8) or DIN 50009 or DIN EN ISO 17070 (EN ISO 17070)	POP's regulation (EU) 2019/1021: 5 mg/kg (Detection Limit: 0.5 mg/kg)  Swiss Chemical Risk Reduction Ordinance (ChemRRV/ORRChem) Art. 3 Appendix 1.2 and Appendix 2.17 Not used; 5 mg/kg (wood-based materials)  German Food, Feed and Commodities Law §30 (LFGB §30) 5 mg/kg  German Chemicals Prohibition Ordinance (ChemVerbotsV), Appendix 1 5 mg/kg (PCP-treated products)  Requirement Westwing: < 0.5 mg/kg NOTE: If PCP in a concentration 0.5 mg/kg - 5 mg/kg has been detected, a re-test on a new send-in component/sample needs to be conducted automatically
Dimethylfumarate	Dimethylfumarate (DMFu)	624-49-7		DMFu is an anti-mold agent that may be used in sachets in packaging to prevent the buildup of mold, especially during shipping. May be found in leather products	EN ISO 16186 (ISO 16186)	EU REACH ANNEX XVII Entry 61 0.1 mg/kg

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value		
Alkylphenol Ethoxylates (APEOs)	Nonylphenol ethoxylates (NPEOs) and Octylphenol ethoxylates (OPEOs)	—	X	APEOs can be used as or found in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings.	EN ISO 18254-1 (ISO 18254-1) or Solvent Extraction, GC-MS Analysis or LC-MS Analysis	EU REACH ANNEX XVII Entry 46a for textile article, which can reasonably be expected to be washed in water during their normal lifecycle: < 100 mg/kg (0.01%) for NPEO for all other articles: 1000 mg/kg (SVHC) (0.1 %) (SVHC)  OPEOs: All articles: 1000 mg/kg (0.1 %) (SVHC)		
Per- and Polyfluoroalkyl Substances (PFAS)	Perfluorooctane Sulfonate (PFOS) and Related Substances	Perfluorooctanesulfonic acid (PFOS)	1763-23-1		PFAS may be present as unintended byproducts in long-chain and short-chain commercial water-, oil-, and stain-repellent agents. PFOA may also be used in polymers like Polytetrafluoroethylene (PTFE).  All PFAS are either persistent themselves or degrade to other persistent PFAS. Persistence due to strength of the carbon-fluorine bond. PFAS remain in environment for decades to centuries, so called "Forever Chemicals".	EN ISO 23702-1 (ISO 23702-1) or EN 17681-1 or EN 17681-2 or CEN/TS 15968	POP's regulation (EU) 2019/1021  sum 1 µg/m <sup>2</sup> for textile and coated material	
		Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3					
		Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5					
		Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH <sub>4</sub> )	29081-56-9					
		Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) <sub>2</sub> )	70225-14-8					
		Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )	56773-42-3					
		N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2					
		N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	31506-32-8					
		2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2					
		2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-7					
	Perfluorooctanoic Acid (PFOA) and its Salts	Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7				POP's regulation (EU) 2019/1021  PFOA and its salts: sum 0.025 mg/kg (25 ppb, 0.0000025%) PFOA-related compounds: sum 1 mg/kg (1000 ppb, 0.0001%)	
		Perfluorooctane sulfonamide (PFOSA)	754-91-6					
		Perfluorooctanoic acid (PFOA)	335-67-1	X				
		Sodium perfluorooctanoate (PFOA-Na)	335-95-5					
		Potassium perfluorooctanoate (PFOA-K)	2395-00-8					
		Silver perfluorooctanoate (PFOA-Ag)	335-93-3					
		Perfluorooctanoyl fluoride (PFOA-F)	335-66-0					
		Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	X				
		PFOA-related compounds	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4				
			Methyl perfluorooctanoate (Me-PFOA)	376-27-2				
	Ethyl perfluorooctanoate (Et-PFOA)		3108-24-5					
	2-Perfluorooctylethanol (8:2 FTOH)		678-39-7					
	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)		27905-45-9					
	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)		1996-88-9					
	C9-C14 PFCAs and their Salts	2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)	34598-33-9					
		Perfluorononanoic Acid (PFNA, C9-PFCA)	375-95-1	X				
		Perfluorodecanoic Acid (PFDA, C10-PFCA)	335-76-2	X				
	Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	2058-94-8	X					

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
C9-C14 PFCA- related Substances	Perfluorododecanoic Acid (PFDoA, C12-PFCA)	307-55-1	X			0.0000025%) C9-C14 PFCA-related substances: sum 0.26 mg/kg (260 ppb, 0.000026%)
	Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)	72629-94-8	X			
	Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	376-06-7	X			
	Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6				
	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5				
	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9				
	1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1				
	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5				
	1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0				
	1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1				
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2					
Flame Retardants	Polybromobiphenyls (PBB)	59536-65-1		With very limited exceptions, flameretardant chemicals, including the entire class of Organohalogen flame retardants, should no longer be applied to materials during production.	EN ISO 17881-1/-2 (ISO 17881-1/-2) or Solvent Extraction, GC-MS Analysis or LC-MS Analysis	EU REACH ANNEX XVII Entry 8 For in skin contact textiles articles: not used (Westwing's Detection Limit: 5 mg/kg for each of 10 substitution groups of PBBs, i.e. from monobromo-, to decabromo-) Requirement: Not detected
	Tris(aziridinyl)phosphin oxide (TEPA)	545-55-1				EU REACH ANNEX XVII Entry 7 For in skin contact textiles articles: not used (Westwing's Detection Limit: 10 mg/kg) Requirement: Not detected
	Tris (2,3 dibromopropyl) phosphate (TRIS)	126-72-7				EU REACH ANNEX XVII Entry 4 For in skin contact textiles articles: not used (Westwing's Detection Limit: 10 mg/kg) Requirement: Not detected
	Octabromodiphenyl ether (OctaBDE)	32536-52-0 and others				EU REACH ANNEX XVII Entry 45 0.1% (1000 mg/kg)
	Hexabromocyclododecane (HBCDD)	3194-55-6 and others				POP's regulation (EU) 2019/1021 0.01% (100 mg/kg)
	Tetrabromodiphenyl ether (TetraBDE)	40088-47-9 and others				POP's regulation (EU) 2019/1021 Sum 500 mg/kg
	Pentabromodiphenyl ether (PentaBDE)	32534-81-9 and others				
	Hexabromodiphenyl ether (HexaBDE)	36483-60-0 and others				
	Heptabromodiphenyl ether (HeptaBDE)	68928-80-3 and others				
Decabromodiphenyl ether (DecaBDE)	1163-19-5	X				

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
Phthalates	Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7	X	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 molding of plastic by decreasing its melting temperature. Phthalates can be found in: • Flexible plastic components (e.g., PVC) • Print pastes • Adhesives • Plastic buttons • Plastic sleeveings • Polymeric coatings	CPSC-CH-C1001-09.4 or EN ISO 14389 (ISO 14389) or ISO 8124-6	EU REACH ANNEX XVII Entry 51 EU REACH ANNEX XVII Entry 72 CMR Substances  Single or sum <=0.1% (1000 mg/kg)
	Dibutylphthalate (DBP)	84-74-2	X			
	Butylbenzylphthalate (BBP)	85-68-7	X			
	Diisobutylphthalate (DIBP)	84-69-5	X			
	1,2-benzenedicarboxylic acid; di-C 6-8-branched alkylesters, C 7-rich	71888-89-6	X			
	Bis(2-methoxyethyl) phthalate	117-82-8	X			
	Diisopentylphthalate	605-50-5	X			
	Di-n-pentyl phthalate (DPP)	131-18-0	X			
Di-n-hexyl phthalate (DnHP)	84-75-3	X				
Polycyclic Aromatic Hydrocarbons (PAHs)	Benzo[a]anthracene	56-55-3	X	PAHs are natural components of crude oil and are common residues from oil refining. PAHs have a characteristic smell similar to that of car tires or asphalt. Oil residues containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastics, lacquers and coatings. PAHs are often found in the outsoles of footwear and in printing pastes for screen prints. PAHs can be present as impurities in Carbon Black. They also may be formed from thermal decomposition of recycled materials during reprocessing.	AfPS GS 2019:01 PAK	EU REACH ANNEX XVII Entry 50 EU REACH ANNEX XVII Entry 72 CMR Substances German Food, Feed and Commodities Law §30 (LFGB §30) AfPS GS 2019:01 PAK  *Follows limits in AfPS GS 2019:01 PAK  Concrete Reach and AfPS GS 2019:01 PAK Requirements: see separate Sheet
	Benzo[e]acephenanthrylene	205-99-2				
	benzo[a]pyrene; benzo[d,e,f]chrysene	50-32-8	X			
	Benzo[e]pyrene	192-97-2				
	Benzo[j]fluoranthene	205-82-3				
	Benzo[k]fluoranthene	207-08-9	X			
	Chrysene	218-01-9	X			
	Dibenzo[a,h]anthracene	53-70-3				
	*Anthracene	120-12-7	X			
	*Benzo[g,h,i]perylene	191-24-2	X			
	*Fluoranthene	206-44-0	X			
	*Indeno[1,2,3-cd]pyrene	193-39-5				
	*Naphthalene	91-20-3				
*Phenanthrene	85-01-8	X				
*Pyrene	129-00-0	X				
Volatile Organic Compound (VOC)	Benzene	71-43-2		VOCs are associated with solvent based processes such as solventbased polyurethane coatings and glues/adhesives.	Headspace GC-MS	EU REACH Annex XVII Entry 5 1000 mg/kg (0.1%) for mixtures  EU REACH ANNEX XVII Entry 72 CMR Substances 5 mg/kg for other materials
	Toluene	108-88-3				
Chlorinated Aromatic Hydrocarbons	α,α,α,4-tetrachlorotoluene; p-chlorobenzotrifluoride	5216-25-1		Chlorobenzenes and Chlorotoluenes (Chlorinated Aromatic Hydrocarbons) can be used as carriers in the dyeing process of polyester or wool/ polyester fibers. They can also be used as solvents.	EN 17137 or DIN 54232 or GC-MS	EU REACH ANNEX XVII Entry 72 CMR Substances each 1 mg/kg  POP's regulation (EU) 2019/1021 and Amendment (EU) 2022/2291 10 mg/kg (0.001%)
	α,α,α-trichlorotoluene; benzotrifluoride	98-07-7				
	α-chlorotoluene; benzyl chloride	100-44-7				
	Hexachlorobenzene	118-74-1				



Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
Solvents	N-methyl-2-pyrrolidone (NMP)	872-50-4	X	Industrial solvent used in production of water-based Polyurethanes and other polymeric materials. May also be used as a surface treatment for textiles, resins, and metal-coated plastics, or as a paint stripper.	EN 17131 or CEN ISO/TS 16189 (ISO/TS 16189)	EU REACH ANNEX XVII Entry 72 CMR Substances each 3000 mg/kg
	N,N-dimethylacetamide (DMAC)	127-19-5	X	Solvent used in the production of elastane fibers and sometimes as substitute for DMFa.		
	N,N-dimethylformamide (DMFa)	68-12-2	X	Solvent used in plastics, rubber, and polyurethane (PU) coating.		
Quinoline	Quinoline	91-22-5		Found as an impurity in polyester and some dyestuffs.	DIN 54231	EU REACH ANNEX XVII Entry 72 CMR Substances 50 mg/kg
Allergenic Carcinogenic Disperse Dyestuffs	C.I. Disperse Blue 1 #	2475-45-8		Disperse dyes are a class of water insoluble dyes that penetrate the fiber system of synthetic or manufactured fibers and are held in place by physical forces without forming chemical bonds. Disperse dyes are used in synthetic fiber (e.g., polyester, acetate etc.).	DIN 54231	German Food, Feed and Commodities Law §30 (LFGB §30) Not detected (detection limit : 5 mg/l in extract)  #EU REACH ANNEX XVII Entry 72 CMR Substances C.I. Disperse Blue 1 C.I. Basic Red 9 C.I. Basic Violet 3 with >=0.1 % of Michler's ketone each 50 mg/kg
	C.I. Disperse Blue 3	2475-46-9				
	C.I. Disperse Blue 35	56524-77-7/56524-76-6				
	C.I. Disperse Blue 106	12223-01-7				
	C.I. Disperse Blue 124	61951-51-7				
	C.I. Disperse Red 1	2872-52-8				
	C.I. Disperse Orange 3	730-40-5				
	C.I. Disperse Orange 37/59/76	13301-61-6/12223-33-5/51811-42-8				
	C.I. Disperse Yellow 3	2832-40-8				
	C.I. Basic Red 9 #	569-61-9				
C.I. Basic Violet 3 with >=0.1 % of Michler's ketone #	548-62-9	X				
High risk SVHCs that were frequently detected	Octamethylcyclotetrasiloxane (D4)	556-67-2	X	Candidate List of substances of very high concern of for Authorisation cover AP/APEO, phthalates, flame retardants, SCCP, MCCP, lead chromate pigment, DMFa, NMP, DMAC, Bisphenols, etc.	Due diligence	REACH Regulation (EC) No 1907/2006 0.1% (w/w) per article/component Supplier needs to notify ECHA by submitting SVHC notification and WESTWING if the article contains an SVHC in quantities above one tonne per producer/importer per year and if the substance is present in those articles above a concentration of 0.1% (w/w).  WFD Directive 2008/98/EC 0.1% (w/w) per article/component Supplier needs to notify ECHA by submit SCIP notification and WESTWING if the article contains an SVHC above a concentration of 0.1% (w/w).  each 1000 mg/kg (0.1%)
	Decamethylcyclopentasiloxane (D5)	541-02-6	X			
	Dodecamethylcyclohexasiloxane (D6)	540-97-6	X			
	Bisphenol A (BPA)	80-05-7	X			
	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with >= 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	—	X			
	4-Nonylphenol, branched and linear	—	X			
	Formamide	75-12-7	X			
	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)	123-77-3	X			
	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV 328)	25973-55-1	X			
	N,N-dimethylformamide	68-12-2	X			
	Medium-chain chlorinated paraffins (MCCP) (UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17)	—	X			
Short Chain Chlorinated Paraffins (C10-13)	85535-84-8	X				

Classification	Restricted Substances	CAS No.	SVHC (Limit to trigger SCIP Notification & SVHC Communication obligations: 1000 mg/kg)	Potential Uses	Testing Method	Regulation / Limit Value
SVH Other SVHCs	—	—	X			
All biocidal treated Product	—	—		Biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms like pests or bacteria, by the action of the active substances contained in the biocidal product.	Due diligence	The Biocidal Products Regulation (BPR, Regulation (EU) 528/2012) -Authorized active substances -the labeling (CLP) Regulation ((EC) No 1272/2008)
PVC Product	—	—		For legal requirement conformance (total Cadmium/Organotins /Phthalates/SCCP etc.) concern.	Due diligence	Phase out PVC material.
Natural Latex Product	—	—		Can cause allergic reaction (to protein) after contacting with human skin.	Due diligence	Phase out natural latex for allergen concern.

Remark:

- 1) REACH Regulation (EC) No 1907/2006 REACH stands for Registration, Evaluation, Authorisation and Restriction of Chemicals. It entered into force on 1 June 2007. REACH is a regulation of the European Union, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry. It also promotes alternative methods for the hazard assessment of substances in order to reduce the number of tests on animals.
- 2) EU REACH ANNEX XVII Entry 72 CMR Substances COMMISSION REGULATION (EU) 2018/1513 of 10 October 2018 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards certain substances classified as carcinogenic, mutagenic or toxic for reproduction (CMR), category 1A or 1B
- 3) BPR, Regulation (EU) 528/2012 The Biocidal Products Regulation (BPR, Regulation (EU) 528/2012) concerns the placing on the market and use of biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms like pests or bacteria, by the action of the active substances contained in the biocidal product. This regulation aims to improve the functioning of the biocidal products market in the EU, while ensuring a high level of protection for humans and the environment.
- 4) POP's regulation (EU) 2019/1021 Persistent organic pollutants (POPs) are organic substances that persist in the environment, accumulate in living organisms and pose a risk to our health and the environment. They can be transported by air, water or migratory species across international borders, reaching regions where they have never been produced or used. International risk management is necessary as no region can manage the risks posed by these substances alone.
- 5) CLP Regulation (EC) No 1272/2008 The Classification, Labelling and Packaging (CLP) Regulation ((EC) No 1272/2008) is based on the United Nations' Globally Harmonised System (GHS) and its purpose is to ensure a high level of protection of health and the environment, as well as the free movement of substances, mixtures and articles.
- 6) WFD, Directive 2008/98/EC Directive 2008/98/EC on waste (Waste Framework Directive) sets the basic concepts and definitions related to waste management, such as definitions of waste, recycling, recovery. It explains when waste ceases to be waste and becomes a secondary raw material (so called end-of-waste criteria), and how to distinguish between waste and by-products, and lays down some basic waste management principle.