RESTRICTED SUBSTANCES LIST ZEEMAN

RSL VERSION 9.0

MAY 2025

ZEEMAN

Table of contents RSL 9.0 (version May 2025)

INTRODUCTION RSL 9.0 (version May 2025)

Dear Supplier,

We would like to remind you that as a supplier to Zeeman you have committed to ensuring that all products supplied fully comply with European and customer restrictions on the use of harmful substances. Zeeman's restrictions are generally based on existing European Legislation. However, in certain instances where there is evidence that a product may present a risk for the customer and current legislation is thought to be inadequate, stricter and/or additional limitations have been imposed.

These Zeeman standards are mandatory and we fully expect and require that all our suppliers comply with these requirements as part of our contractual relationship.

Whilst we recognize the additional challenges that may be faced by our supply chain with respect to these requirements, we stress that non-compliance can have serious consequences and maintaining these standards is essential for protecting the future of our business. It remains a primary aim of Zeeman to ensure that only safe, legally compliant and clean products are offered for sale in our stores and therefore failure to comply with these requirements will result in an immediate removal of product from stores.

It is imperative that you carry out due diligence checks on your suppliers, their products and the finished products you export to Zeeman, this can be done by means of test reports issued by accredited testing houses as well as proactively identifing potential problems and developing commercially viable solutions to them. This not only provides you with guarantees that your suppliers are consistently meeting required standards but also significantly reduces the risk of any problems arising with your merchandise if and when your styles are selected for pre-shipment testing.

The Zeeman Restricted Substances List (RSL version 9.0 May 2025) and the Zeeman Manufacturing Restricted Substances List (MRSL version 3.1 May 2025) are two separate documents. The RSL and the MRSL should be communicated to all (raw material) suppliers. All chemicals used in any production process must meet the requirements of the Zeeman MRSL and all products delivered to Zeeman must meet the requirements of the RSL.

ZEEMAN has added the GOTS requirements for GOTS certified products.
Suppliers that participate in the Global Organic Textile Standard (GOTS) certification program (www.global-standard.org), with completion of GOTS certification, use only GOTS accepted chemical inputs such as dyestuffs, prints and auxiliary agents and therefore meet the requirements of the GOTS (M) RSL. Please be aware that the requirements as specified in the GOTS standard 7.0 always prevail over the GOTS requirements mentioned in this RSL. **Products that are not GOTS certified shall only be subject to the ZEEMAN requirements.**

A valid OEKO-TEX® Standard 100 product certificate issued by the OEKO-TEX® Association (www.oeko-tex.com) covers most of the requirements of this RSL. The Sustainable Textile Production (STeP) certification system has a wider scope which includes an analysis of a production facility's management and performance with respect to certain environmental considerations. Certification based on the Oeko-Tex ® Standard 100 or STeP can be more cost effective than carrying out single audits. **All suppliers delivering an Oekotex certified product to Zeeman must take into account that the requirments as mentioned in the Oekotex 100 standard always prevail over the requirements mentioned in this (M)RSL.**

It is also possible that one or more of your styles could be selected for random testing at a certified laboratory.

As a matter of general principle, Zeeman reserves the right to select styles to be (counter) tested upon arrival in our warehouse. If this test produces a “FAIL” result, all of the costs incurred in this testing process shall be borne by the supplier, including all additional costs associated with non-marketable styles.

As part of our ongoing sustainability improvement process, this (M)RSL will be updated on a regular basis to incorporate additions to the list and/or changes to legislation. Together with our vendors, we seek opportunities to achieve continuous improvement in this area. To this end, the (M)RSL can be used as a basis for the development of Quality Management Systems.

Should you have any questions or require further information, please contact the Quality Department at:
quality@zeeman.com

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Materials RSL 9.0 (version May 2025) - Examples of materials within the scope of the ZEEMAN RSL*											
Natural Fibres ***Including semi-synthetics***	**Blended Fibres**	**Synthetic Fibres**	**Synthetic Coated Fabrics**	**Natural Leather & Fur Skin**	**Coatings & Prints**	**Natural Materials**	**Other Materials**	**Polymers, Plastics, Foams, Natural Rubber & Synthetic Rubber**	**Metal**	**Feathers & Down**	**Glue**
• Cotton • Wool • Silk • Hemp • Cashmere • Linen • Fur hair • Viscose (Semi-synthetic) • Lyocell (Semi-synthetic)	• Cotton-Polyester • Wool-Nylon • Ramie-Polyester	• Polyester • Acrylic • Nylon • Polyamide	Textiles with: • Polyurethane (PU) coating • Polyvinyl Chloride (PVC) coating • Other polymeric coatings	• Leather • Fur skin • Bonded / recycled leather	Printing techniques such as: • Heat transfers • Dye sublimation printing • Screen printing • Direct-to- garment printing • Discharge printing • Plastisol transfers Coatings such as: • Polyvinyl chloride (PVC) • Polyurethane (PU) • UV-cured	• Horn • Bone • Cork • Wood • Paper • Straw • Stone • Shell (e.g. coconut or mother of pearl) • Jacron (a semi-synthetic paper product)	• Glass • Synthetic stone • Porcelain • Ceramic • Crystal	• Ethylene vinyl acetate (EVA) • Polystyrene (PS) • Polyethylene (PE) • Acrylonitrile butadiene styrene (ABS) • Neoprene • Polypropylene (PP) • Polycarbonate (PC) • Polyamide (PA) • Polyurethane (PU) • Polyvinyl chloride (PVC) • Thermoplastic polyurethane (TPU) • Thermoplastic elastomer (TPE) • Styrene ethylene butylene styrene (SEBS)	• Stainless steel • Brass • Copper • Gold • Silver • Aluminum	• Feathers • Down	• Hot melt adhesive • Powdered adhesive • Flock adhesive • Contact adhesive • Latex glue • Polyurethane glue • Neoprene cement • Epoxies • Silicone adhesive • UV-cured adhesive
* NOTE: This list provides examples of materials within each category but is not all-inclusive.											

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Risk Matrix Apparel RSL 9.0 (version May 2025)

●●● indicates a higher risk that a chemical is used and/or could be detected in a particular material.

●● indicates a lower risk that a chemical is used and/or could be detected in a particular material.

No dot indicates that the risk is not anticipated in a particular material.

CHEMICAL	NATURAL FIBERS	SYNTHETIC FIBERS	NATURAL & SYNTHETIC BLENDS	SYNTHETIC COATED FABRICS	NATURAL LEATHER & FUR SKIN	NATURAL MATERIALS	METALS	OTHER: Porcelain, Ceramic, Glass, Crystal etc	FEATHERS & DOWN	POLYMERS									COATING AND PRINTS	GLUE
										EVA	PU Foams	All other PU & TPU	Rubber excludes latex and silicon rubbers	Polycarbonate	ABS	PVC	All Other foams, plastics & Polymer			
ACETOPHENONE & 2-PHENYL-2-PROPANOL										●●										
ACIDIC AND ALKALINE SUBSTANCES (pH)	●●●	●●●	●●●	●●●	●●●															
ALKYLPHENOL (AP) & ALKYLPHENOL ETHOXYLATES (APEOs), including all isomers	●●●	●●●	●●●	●●●	●●●	●●●			●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●
AZO AMINES AND ARYLAMINE SALTS	●●●/A	●●●/A	●●●/A	●●●/A	●●●/A	●●●/A			●●●/A										●●●	
BISPHENOLS		●●●	●●●	●●●	●●●					●●	●●	●●	●●	●●●	●●	●●	●●			
BROMINATED & ORGANOPHOSPHOROUS SUBSTANCES	●●/B																			
CHLORINATED PARAFFINS				●●/K	●●●					●●	●●	●●●	●●●	●●	●●	●●●	●●			
CHLOROPHENOLS	●●	●●	●●		●●															
CHLORINATED BENZENES AND TOLUENES		●●	●●	●●																
CYCLOSILOXANES	●●	●●	●●														●●/C	●●		
DIMETHYLFUMURATE (DMFu)					●●															
DISPERSE DYES - ALLERGENIC		●●●/A	●●●/A	●●●/A														●●		
DYES - CARCINOGENIC		●●●/A	●●●/A	●●●/A														●●		
DYES - NAVY BLUE		●●	●●																	
FLUORINATED GREENHOUSE GASES																				
FORMALDEHYDE	●●●	●●●	●●●	●●	●●●	●●●/D							●●					●●●	●●●	
HEAVY METALS CHROMIUM VI	●●/E	●●/F			●●●															
HEAVY METALS EXTRACTABLE	●●●	●●●	●●●	●●	●●●		●●/G			●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	

A High risk for dyed/colored materials (non-white) only

B Medium risk only if Flame Retardant use or contamination is suspected or if TPP use suspected in PU,TPU, or other polymeric materials

C Medium risk for silicone polymers only

D High risk for Wood, Paper, and Straw materials only

E Medium risk for Wool materials only

F Medium risk if extractable Chrome above 1 mg/kg only

G Copper is exempt from restriction limits in Metal parts

H Medium risk for plant-based fibers only; N/A for animalbased fibers

J High risk for Cadmium and Lead only; Crystal is exempt for Lead

K High risk for PVC materials only. Otherwise medium risk

L Medium risk for Styrene/Butadiene Rubbers (SBRs) only

M High risk if PFAS use or contamination is suspected

N High risk if Rubber or black Polymeric materials, otherwise medium risk

P High risk for PU and PVC- based materials only

Q High risk for glues fixed in final product

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Risk Matrix Apparel RSL 9.0 (version May 2025)

●●● indicates a higher risk that a chemical is used and/or could be detected in a particular material.

●● indicates a lower risk that a chemical is used and/or could be detected in a particular material.

No dot indicates that the risk is not anticipated in a particular material.

CHEMICAL	NATURAL FIBERS	SYNTHETIC FIBERS	NATURAL & SYNTHETIC BLENDS	SYNTHETIC COATED FABRICS	NATURAL LEATHER & FUR SKIN	NATURAL MATERIALS	METALS	OTHER: Porcelain, Ceramic, Glass, Crystal etc	FEATHERS & DOWN	POLYMERS									COATING AND PRINTS	GLUE
										EVA	PU Foams	All other PU & TPU	Rubber excludes latex and silicon rubbers	Polycarbonate	ABS	PVC	All Other foams, plastics & Polymer			
HEAVY METALS, RELEASABLE NICKEL							●●●													
HEAVY METALS TOTAL CONTENT	●●/H		●●/H	●●●	●●		●●●	●●●/J		●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●
MONOMERS, STYRENE & VINYL CHLORIDE				●●●/K									●●/L		●●	●●●		●●●/K		
N-NITROSAMINES											●●	●●	●●							
ORGANOTIN COMPOUNDS		●●	●●	●●●	●●						●●●	●●●	●●●			●●●	●●●	●●●	●●●	●●●
ORTHO-PHENYLPHENOL (OPP)	●●	●●	●●	●●	●●													●●		
OZONE DEPLETING SUBSTANCES																				
PER - AND POLYFLUOROAKYL SUBSTANCES (PFAS)	●●●/M																			
PESTICIDES, AGRICULTURAL																				
PHTHALATES				●●●						●●●	●●●	●●●	●●●	●●	●●	●●●	●●●	●●●	●●●	●●●
POLYCLIC AROMATIC HYDROCARBONS				●●						●●●/N	●●●/N	●●●/N	●●●			●●●/N	●●●/N	●●●/N	●●●/N	●●●/N
QUINOLINE		●●	●●																	
SOLVENTS/RESIDUALS DMFa				●●●							●●●	●●●						●●●/P	●●●/P	
SOLVENTS/RESIDUALS DMAC AND NMP				●●●							●●	●●					●●	●●	●●	
SOLVENTS/RESIDUALS FORMAMIDE										●●								●●		
UV ABSORBERS/STABILISERS										●●	●●	●●	●●	●●	●●	●●	●●			
VOLATILE ORGANIC COMPOUNDS (VOCs)				●●						●●	●●	●●	●●	●●	●●	●●	●●	●●	●●/Q	

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C Medium risk for silicone polymers only

D High risk for Wood, Paper, and Straw materials only

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F Medium risk if extractable Chrome above 1 mg/kg only

G Copper is exempt from restriction limits in Metal parts

H Medium risk for plant-based fibers only; N/A for animalbased fibers

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L Medium risk for Styrene/Butadiene Rubbers (SBRs) only

M High risk if PFAS use or contamination is suspected

N High risk if Rubber or black Polymeric materials, otherwise medium risk

P High risk for PU and PVC- based materials only

Q High risk for glues fixed in final product

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Packaging Matrix RSL 9.0 (version May 2025)

●●● indicates a high risk that a chemical is used and/or could be detected in a particular material.

●● indicates a medium risk that a chemical is used and/or could be detected in a particular material.

No dot indicates that there is a negligable risk of a chemical being used and/or detected in a particular material.

SUBSTANCE	NATURAL FIBERS	BLENDED FIBERS	SYNTHETIC FIBERS	COATINGS, DYES & PRINTS	NATURAL MATERIALS including paper and cardboard	POLYMERS, PLASTICS, FOAMS, NATURAL RUBBER & SYNTHETIC RUBBER	METAL	GLUE	LEATHER Natural	LEATHER Artificial
ALKYPHENOL (AP) AND ALKYPHENOL ETHOXYLATES (APEO) including all isomers	●●●	●●●	●●●	●●●	●●●	●●●/A		●●●	●●●	●●●
AZO-AMINES AND ARYLAMINE SALTS	●●●/B	●●●/B	●●●/B		●●●/B				●●●/B	●●●/B
BISPHENOLS		●●●	●●●	●●●/C	●●●/D	●●/E			●●●	●●●
BUTYLHYDROXYTOLUENE (BHT)						●●/F				
DIMETHYLFUMARATE (DMFu)						●●/G			●●	
FLAME RETARDANTS						●●/J				
FORMALDEHYDE	●●	●●	●●	●●●	●●●	●●/H		●●●	●●	●●
HEAVY METALS, TOTAL CONTENT (Cd, CrVI, Pb, Hg)*				●●	●●/J	●●/K	●●		●●	
MOSH/MOAH				●●●/L	●●●/M	●●●/L				
ORGANOTIN COMPOUNDS				●●●		●●●		●●●	●●	●●●
PERFLUORINATED AND POLYFLUORINATED CHEMICALS (PFAS)	**Prohibited**									
PHTHALATES				●●●/N		●●●/O		●●●	●●/P	●●●

A High risk for foams only; Medium risk for all other materials.

B High risk for dyed/colored materials (non-white) only

C High risk for PVC only; Medium risk for all other materials.

D High risk for thermal receipt and recycled paper only; Medium risk for all other materials.

E Medium risk for tapes, polycarbonate, and recycled plastic cases only; no testing requirement for other materials

F Medium risk for poly bags only; no testing requirement for other materials.

G Medium risk for silica gel packets and foam packaging only; no testing requirement for other material

H Medium risk for rubber only, no testing requirement for other materials

J Medium risk for materials with high recycled content only; no testing requirement for other materials

K Medium risk for PVC only, no testing requirement for other materials

L High risk for printed packaging materials

M High risk for recycled paper

N High risk for plastisol prints; Medium risk for all other materials.

O Medium risk for polycarbonate and ABS, High risk for all other polymers.

P Medium risk for patent or coated leather; no testing requirement for other materials

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

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RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
ADSORBABLE HALOGENIC COMPOUNDS (AOX)						
AOX	Various	GOTS	Extraction with boiling water, adsorption on charcoal; AOX analyser based on ISO 9562 Alternatively: HJ/T 83-2001		< 5 mg/kg	Adsorbable Organic Halides (AOX) is a measure of the organic halogen load at a sampling site such as soil from a land fill, water, or sewage waste. The procedure measures chlorine, bromine, and iodine as equivalent halogens, but does not measure fluorine levels in the sample. AOX is permanent, if the halogen is permanently bound to the molecule (e.g. in the chromophore of a dyestuff or pig- ment) and cannot get hydrolysed or released during fibre processing.
ACETOPHENONE & 2-PHENYL-2-PROPANOL						
Acetophenone	98-86-2		Extraction in acetone or methanol GC/MS, sonication for 30 minutes at 60 degrees C	< 50 mg/kg each	Not detected	Potential breakdown products in EVA foam when using Dicumyl Peroxide as a cross-linking agent.
2-Phenyl-2-Propanol	617-94-7					

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RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
ACIDIC AND ALKALINE SUBSTANCES						
pH value for textiles	N.A.		Textiles and Synthetic coated fabrics: EN ISO 3071:2020 Leather: EN ISO 4045:2018	Textiles: 4.0 – 7.5 Leather: Chrome-tanned: 3.2 – 5.5 Other: 3.5 – 7.5	No skin contact: 4.5- 9.0 All others: 4.5 – 7.5	pH value is a characteristic number, ranging from pH 0 to pH 14, which indirectly shows the content of acidic or alkaline substances in a product. pH values less than 7 indicate sources of acidic substances, and values greater than 7 indicate sources of alkaline substances. To avoid irritation or chemical burns to the skin, the pH value of products must be in the range of human skin— approximately pH 5.5. ZEEMAN recommends the limits cited to comply with global regulations and to minimize the chances of Chromium VI formation during tanning and processing of leather. For chrome-tanned leather, the final fixing bath of the re-tanning process should always have a pH below 4.0 to guard against the formation of Chromium VI.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
ALKYLPHENOLS (AP) AND ALKYLPHENOL ETHOXYLATES (APEO)						
Nonylphenols (NP)	Various	EU: REACH Regulation 1907/2006 Annex XVII entry No. 46 EU: REACH Regulation 1907/2006 SVHC Candidate List	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	Total APs: < 10 mg/kg	Usage ban Sum of NP, OP, BP, HpP, PeP: < 10 mg/kg	APEOs can be used as or found in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings. APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers. Biodegradation of APEOs into APs is the main source of APs in the environment. APEOs and formulations containing APEOs are prohibited from use throughout supply chain and manufacturing processes. We acknowledge that residual or trace concentrations of APEOs may still be found at levels exceeding 100 mg/kg and that more time is necessary for the supply chain to phase them out completely. Recycled products: Contact the Zeeman CSR department for information about potential exemptions from the limit on NPEOs in recycled textile products.
Octylphenols (OP)	Various					
4-tert-butylphenol (BP)	98-54-4	EU: REACH Regulation 1907/2006 SVHC Candidate List				
Heptylphenol (HpP)	Various					
Pentylphenol (PeP)	Various					
Nonylphenolethoxylates (NPEO)	Various	EU: REACH Regulation 1907/2006 Annex XVII entry No. 46 + 46a EU:REACH Regulation 1907/2006 SVHC Candidate List	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 18218-1:2023 with quantification according to EN ISO 18254-1:2016	Total APs + APEOs: < 100 mg/kg	Usage ban Sum of NP, OP, BP, HpP, PeP, NPEO, OPEO: < 20 mg/kg	
Octylphenolethoxylates (OPEO)	Various					

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RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
AZO AMINES AND ARYLAMINE SALTS						
4-Aminobiphenyl	92-67-1	EU: REACH Regulation 1907/2006 Annex XVII entry No. 43 + appendix 8	All materials except leather: EN ISO 14362-1:2017 Leather: EN ISO 17234-1:2024 Test Method for confirmation of 4-Aminoazobenzene (4AAB): All materials except leather: EN 14362-3: 2017 Leather: EN ISO 17234-2: 2011	< 20 mg/kg each	Arylamines with carcinogenic properties (amine releasing azo dyes mak III, category 1,2,3) < 20 mg/kg	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.
Benzidine	92-87-5					
4-Chloro-o-toluidine	95-69-2					
2-Naphtylamine	91-59-8					
o-Aminoazotoluene	97-56-3					
2-Amino-4-nitrotoluene	99-55-8					
p-Chloraniline	106-47-8					
2,4-Diaminoanisole	615-05-4					
4,4'-Diaminodiphenylmethane (4,4'-MDA)	101-77-9					
3,3'-Dichlorobenzidine	91-94-1					
3,3'-Dimethoxybenzidine	119-90-4					
3,3'-Dimethylbenzidine	119-93-7					
3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0					
p-Cresidine	120-71-8					
4,4'-Methylene-bis(2-chloraniline)	101-14-4					
4,4'-Oxydianiline	101-80-4					
4,4'-Thiodianiline	139-65-1					
o-Toluidine	95-53-4					
2,4-Toluenediamine (2,4-TDA)	95-80-7					
2,4,5-Trimethylaniline	137-17-7					
o-Anisidine (2-Methoxyaniline)	90-04-0					
4-Aminoazobenzene (4-AAB)	60-09-3					
2,4-Xylidine	95-68-1					
2,6-Xylidine	87-62-7					
4-Chloro-o-toluidinium chloride	3165-93-3	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12				
2-Naphthylammoniumacetate	553-00-4					
4-Methoxy-m-phenylene diammonium sulphate	39156-41-7					
2,4,5-Trimethylaniline hydrochloride	21436-97-5					
p-Phenylenediamine	106-50-3			< 250 mg/kg		

ZEEMAN

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SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
BISPHENOLS						
Bisphenol A (4,4'-Isopropylidenediphenol) (BPA)	80-05-7	EU: REACH Regulation 1907/2006 SVHC Candidate List	Leather: EN ISO 11936:2023 All other materials: Extraction: 1g sample/20 ml THF, sonication for 60 minutes at 60° C, then add methanol or acetonitrile for precipitation prior to 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.	Textiles and leather: < 10 mg/kg Items intended to come into contact with the mouth: < 1 mg/kg	Prohibited	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.
Bisphenol S (BPS)	80-09-1			Textiles: < 200 mg/kg each Leather: < 800 mg/kg each		
Bisphenol B (BPB)	77-40-7					
Bisphenol F (BPF)	620-92-8					

ZEEMAN

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SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
BROMINATED AND ORGANOPHOSPHOROUS SUBSTANCES (formerly Flame Retardants)						
Decabromodiphenyl ethane (DBDPE)	84852-53-9		EN ISO 17881-1 (2016) for brominated flame retardants . EN ISO 17881-2 (2016) for phosphorus flame retardants	< 10 mg/kg each *Banned in textiles with skin contact	Prohibited are: - Chlorinated flame retardants - Brominated flame retardants - Phosphate based flame retardants - Flame retardants containing Antimony or Antimony Trioxide - Disodium Octaborate	With very limited exceptions, flame-retardant substances, including the entire class of organohalogen flame retardants, should no longer be applied to materials during production. Listed here are examples of flame-retardant substances used historically across the apparel and footwear industry. It is not intended to be a complete list. Other flame retardants not applicable to this industry are regulated worldwide by the Stockholm Convention and the Aarhus Protocol, which have been implemented in the European Union under the POPs Regulation. The 10 mg/kg limit is established to account for incidental impurities, byproducts, and contaminants. Flame retardants should not be used for any other purpose, e.g., as softeners or plasticizers.
Tris-(2,3-dibromopropyl)- phosphate (TRIS) *	126-72-7	EU: REACH Regulation 1907/2006 Annex XVII entry No. 4				
Tris - (aziridinyl) - phosphineoxide (TEPA)*	545-55-1	EU: REACH Regulation 1907/2006 Annex XVII entry No.7				
Polybrominated biphenyls (PBB) *	59536-65-1	EU: REACH Regulation 1907/2006 Annex XVII entry No.8				
Octabromodiphenylether (OctaBDE)	32536-52-0	EU: REACH Regulation 1907/2006 Annex XVII entry No.45				
All other Polybrominated diphenyl ethers (PBDEs)	Various	EU:Regulation 2019/1021 on Persistant Organic Pollutants				
Decabromodiphenylether (DecaBDE)	1163-19-5					
Pentabromodiphenylethers (PentaBDEs)	32534-81-9					
Heptabromodiphenylethers (HeptaBDEs)	68928-80-3					
Tetrabromodiphenylethers (TetraBDEs)	40088-47-9					
Hexabromodiphenylethers (HexaBDEs)	36483-60-0					
Hexabromocyclododecane and all main diastereomeres identified (alpha-, beta-, gamma-) (HBCDD)	3194-55-6 134237-50-6 134237-51-7 134237-52-8 25637-99-4					
Tetrabromobisphenol A (TBBPA) **	79-94-7	The Flame retardants marked ** are included in EU: REACH Regulation 1907/2006 SVHC Candidate List				
2,2-bis(bromomethyl)-1,3-propanediol (BBMP) **	3296-90-0					
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8					
Trixylylphosphate (TXP)**	25155-23-1					
Tris-(2-chloroethyl)-phosphate (TCEP)	115-96-8					
Bis-(2,3-dibromopropyl)phosphate (BDBPP)	5412-25-9					
Triphenyl phosphate (TPP)	115-86-6					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
CHLORINATED PARAFFINS						
Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	85535-84-8	EU: Regulation 2019/1021 on Persistant Organic Pollutants EU: REACH Regulation 1907/2006 SVHC Candidate List	Leather: ISO 18219-1:2021 (SCCP) ISO 18219-2:2021 (MCCP) Textiles and all other materials: ISO 22818:2021 (SCCP + MCCP)	< 1000 mg/kg	Sum parameter: < 50 mg/kg	May be used as softeners, flame retardants, or fat-liquoring agents in leather production; also as a plasticizer in polymer production.
Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	85535-85-9	EU: Regulation 1907/2006 Candidate List.		< 1000 mg/kg		
CHLOROPHENOLS						
Pentachlorophenol (PCP) and its salts and esters	87-86-5	EU: Regulation 2019/1021 on Persistant Organic Pollutants	All materials: EN 17134-2:2023	< 0.5 mg/kg each	PCP: < 0.01 mg/kg	Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP), Tetrachlorophenol (TeCP), and Trichlorophenols (TriCP) are sometimes used to prevent mold and kill insects when growing cotton and when storing/transporting fabrics. PCP, TeCP, and TriCP can also be used as in-can preservatives in print pastes and other chemical mixtures.
2,3,5,6- Tetrachlorophenol (TeCP)	935-95-5	SWITZERLAND: ORRChem annex 1.2 (Art.3)			TeCP: < 0.01 mg/kg	
2,3,4,6- Tetrachlorphenol (TeCP)	58-90-2					
2,3,4,5- Tetrachlorphenol (TeCP)	4901-51-3					
2,3,4-Trichlorophenol (TriCP)	15950-66-0	GOTS			TrCP: < 0.2 mg/kg	
2,3,5-Trichlorophenol (TriCP)	933-78-8					
2,3,6-Trichlorophenol (TriCP)	933-75-5					
2,4,5-Trichlorophenol (TriCP)	95-95-4					
2,4,6-Trichlorophenol (TriCP)	88-06-2					
3,4,5-Trichlorophenol (TriCP)	609-19-8					
Dichlorophenol (DCP)	576-24-9 120-83-2 583-78-8 87-65-0 95-77-2 591-35-5				DCP: < 0.5 mg/kg	
Chlorophenol (MCP)	95-57-8 108-43-0 106-48-9				MCP: < 0.5 mg/kg	

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
CHLORINATED BENZENES AND TOLUENES						
2-Chlorotoluene	95-49-8		All materials: EN 17137:2024	< 1 mg/kg total	< 1 mg/kg	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. Cross-contamination from anti-moth agents and poly shipping bags may cause failures.
3-Chlorotoluene	108-41-8					
4-Chlorotoluene	106-43-4					
2,3-Dichlorotoluene	32768-54-0					
2,4-Dichlorotoluene	95-73-8					
2,5-Dichlorotoluene	19398-61-9					
2,6-Dichlorotoluene	118-69-4					
3,4-Dichlorotoluene	95-75-0					
2,3,6-Trichlorotoluene	2077-46-5					
2,4,5-Trichlorotoluene	6639-30-1					
2,3,4,5-Tetrachlorotoluene	76057-12-0					
2,3,4,6-Tetrachlorotoluene	875-40-1					
2,3,5,6-Tetrachlorotoluene	1006-31-1					
Pentachlorotoluene	877-11-2					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
CHLORINATED BENZENES AND TOLUENES CONTINUED						
1,3-Dichlorobenzene	541-73-1		All materials: EN 17137:2018	< 1 mg/kg total	< 1 mg/kg	Chlorobenzenes and Chlorotoluenes (Chlorinated Aromatic Hydrocarbons) can be used as carriers in the dyeing process of polyester or wool/ polyester. They can also be used as solvents. Cross-contamination from anti-moth agents and poly shipping bags may cause failures.
1,4-Dichlorobenzene	106-46-7					
1,2,3-Trichlorobenzene	87-61-6					
1,2,4-Trichlorobenzene	120-82-1	SWITZERLAND: ORRChem annex 1.2 (Art.3)				
1,3,5-Trichlorobenzene	108-70-3					
1,2,3,4-Tetrachlorobenzene	634-66-2					
1,2,3,5-Tetrachlorobenzene	634-90-2					
1,2,4,5-Tetrachlorobenzene	95-94-3					
Pentachlorobenzene	608-93-5	EU: Regulation 2019/1021 on Persistant Organic Pollutants				
Hexachlorobenzene	118-74-1					
p-Chlorobenzotrichloride	5216-25-1	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12				
Benzotrichloride	98-07-7					
Benzyl Chloride	100-44-7					
1,2-Dichlorobenzene	95-50-1			< 10 mg/kg		
CYCLOSILOXANES						
Octamethylcyclotetrasiloxane (D4)	556-67-2	EU: Regulation 1907/2006 SVHC Candidate List	All materials: Ultrasonic extraction with nonchlorinated organic solvent for 30 min at 40°C then GC/MS	< 1000 mg/kg each	< 250 mg/kg	May be present in silicone pads and as contaminants in formulations that contain silicone, like silicone softeners and those used for prints. They are SVHCs.
Decamethylcyclopentasiloxane (D5)	541-02-6				< 1000 mg/kg	
Dodecamethylcyclohexasiloxane (D6)	540-97-6					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
DIMETHYLFUMARATE (DMFu)						
Dimethylfumarate	624-49-7	EU: REACH Regulation 1907/2006 Annex XVII entry No.61	All materials: ISO 16186:2021	< 0.1 mg/kg	< 0.1 mg/kg (legal requirement)	DMFu is an anti-mold agent that may be used in sachets in packaging to prevent the buildup of mold, especially during shipping.

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
DYES WHICH ARE CLASSIFIED TO BE ALLERGENIC						
C.I. Disperse Blue 1	2475-45-8	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12	All materials: DIN 54231: 2022	< 30 mg/kg each	Prohibited are (disperse) dyes classified as senzitizing / allergenic < 20 mg/kg	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, polyamide). Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles.
C.I. Disperse Blue 35A	56524-77-7	GERMANY: The authoritative German Federal Institute for Risk Assessment (BfR) strongly advises not to to use the sensitising disperse dyes listed. Please note that in Germany findings for these substances are judged according to the Lebensmittel- , Bedarfsgegenstände-, und Futtermittelgesetzbuch (LFGB), which is somehow legally binding and considered to be best practice				
C.I. Disperse Blue 35B	56524-76-6					
C.I. Disperse Blue 106	12223-01-7					
C.I. Disperse Blue 124	61951-51-7					
C.I. Disperse Orange 3	730-40-5					
C.I. Disperse Orange 37/59/76	12223-33-5 13301-61-6 51811-42-8					
C.I. Disperse Red 1	2872-52-8					
C.I. Disperse Yellow 3	2832-40-8					
C.I. Disperse Blue 3	2475-46-9	GOTS				
C.I. Disperse Blue 7	3179-90-6					
C.I. Disperse Blue 26	3860-63-7					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
DYES WHICH ARE CLASSIFIED TO BE ALLERGENIC CONTINUED						
C.I. Disperse Blue 102	12222-97-8	GOTS	All materials: DIN 54231: 2022	< 30 mg/kg each	Prohibited are (disperse) dyes classified as senzitizing / allergenic < 20 mg/kg	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, polyamide). Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles. *A number of disperse dyes on the market are regarded as skin sensitisers (H317), however, they are not allergenic. The use of these dyes is not prohibited as long as occupational health and safety prodedures such as safe handling are strictly followed as outlined in respected Safety Data Sheets
C.I. Disperse Brown 1	23355-64-8					
C.I. Disperse Orange 1	2581-69-3					
C.I. Disperse Orange 11	82-28-0					
C.I. Disperse Orange 149	85136-74-9					
C.I. Disperse Red 11	2872-48-2					
C.I. Disperse Red 17	3179-89-3					
C.I. Disperse Red 151	61968-47-6					
C.I. Disperse Yellow 1	119-15-3					
C.I. Disperse Yellow 7	6300-37-4					
C.I. Disperse Yellow 9	6373-73-5					
C.I. Disperse Yellow 23	6250-23-3					
C.I. Disperse Yellow 39	12236-29-2					
C.I. Disperse Yellow 49	54824-37-2					
C.I. Disperse Yellow 56	54077-16-6					
C.I. Disperse Violet 1	128-95-0					
C.I. Disperse Violet 93*	66557-45-7					
C.I Disperse Blue 291 *	56548-64-2					
C.I. Disperse Yellow 54*	12223-85-7					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
DYES WHICH ARE CLASSIFIED TO BE CARCINOGENIC						
C.I. Acid Red 26	3761-53-3		All materials: DIN 54231: 2022	< 30 mg/kg each	Prohibited are colourants classified carcinogenic (H350/H351) < 20 mg/kg	Acid dyes are water-soluble anionic dyes mainly used on fibers such as wool, silk, and nylon.
C.I. Acid Violet 49	1694-09-3					
C.I. Acid Red 114	6459-94-5					
C.I. Basic Red 9	569-61-9	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12				Basic dyes are water- soluble cationic dyes mainly used on acrylic fibers.
C.I. Basic Violet 3 (with ≥ 0.1 % Michler's ketone or base)	548-62-9					
C.I. Basic Blue 26 (with ≥ 0.1 % Michler's ketone or base) *	2580-56-5	The dyes marked* are included in EU: REACH Regulation 1907/2006 SVHC Candidate List				
C.I. Basic Green 4 (oxalate, chloride or free	2437-29-8 569-64-2 10309-95-2					
C.I. Basic Violet 14 *	632-99-5					
C.I. Direct Black 38 *	1937-37-7					Direct dyes are used on natural fibers such as cotton, linen, cellulose and in special treatments such as dip dyes.
C.I. Direct Blue 6	2602-46-2					
C.I. Direct Blue 15	2429-74-5					
C.I. Direct Brown 95	16071-86-6					
C.I. Direct Red 28 *	573-58-0					
C.I. Solvent Yellow 1 (4-Aminoazobenzene)	60-09-3					Solvent dyes are dyes which are soluble in organic solvents, and can be used on natural and synthetic fibers.
4-Dimethylaminoazobenzene (Solvent Yellow 2)	60-11-7					
C.I. Solvent Blue 4 *	6786-83-0					
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol *	561-41-1					
C.I Basic yellow 2 / Solvent yellow 34 (hydrochloride and free base)	2465-27-2 492-80-8					
C.I. Pigment Red 104 (Lead chromate molybdate sulphate red)	12656-85-8					Pigment dyes are widely used in a variety of fiber and material types.
C.I. Pigment Yellow 34 (Lead sulfochromate yellow)	1344-37-2					

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
DYES, NAVY BLUE						
Navy Blue Component 1: C39H23ClCrN7O12S.2Na Component 2: C46H30CrN10O20S2.3Na	118685-33-9	EU: REACH Regulation 1907/2006 Annnex XVII entry no.43 + appendix 9	All materials: DIN 54231: 2022	< 30 mg/kg	Prohibited are colourants classified carcinogenic (H350/H351) < 20 mg/kg	Navy blue colorants are regulated and prohibited from use for dyeing of textiles. Index 611-070-00-2
FLUORINATED GREENHOUSE GASES						
Fluorinated greenhouse gases	Various	Regulation (EU) 2024/573	Sample preparation: Purge and trap - thermal desorption or SPME Measurement: GC/MS	< 0.1 mg/kg each	Not detected	Prohibited from use. May be used as foam blowing agents, solvents, fire retardants and aerosol propellants.
FORMALDEHYDE						
Formaldehyde	50-00-0	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12	All materials except Leather: 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.	< 3 years : < 16 mg/kg > 3 years: < 75 mg/kg	< 16 mg/kg	Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
GLYOXAL						
Glyoxal and other short- chain aldehydes (mono- & dialdehydes up to C6)	107-22-2	GOTS	Extraction (acc. to ISO 14184-1), ISO 17226-1 (HPLC)		< 20 mg/kg	Coated paper and textile finishes use large amounts of glyoxal as a crosslinker for starch-based formulations. Used for wrinkle-resistant chemical treatments.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
HEAVY METALS EXTRACTABLE						
Antimony (Sb)	7440-36-0	GOTS	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 *Crystal or "lead glass" is exempt from total Lead restrictions **Copper is exempt from restriction limits in Metal parts.	< 30 mg/kg	< 0.2 mg/kg	Found in or used as a catalyst in polymerization of polyester, flame retardants, fixing agents, pigments, and alloys.
Barium (Ba)	7440-39-3			< 1000 mg/kg	< 1000 mg/kg	Barium and its compounds can be used in pigments for inks, plastics, and surface coatings, as well as in dyeing, mordants, filler in plastics, textile finishes, and leather tanning.
Cadmium (Cd)	7440-43-9	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12		< 0.1 mg/kg	< 0.1 mg/kg	Cadmium compounds are used as pigments (especially in red, orange, yellow and green); as a stabilizer for PVC; and in fertilizers, biocides, and paints.
Arsenic (As)	7440-38-2			< 0.2 mg/kg	< 0.2 mg/kg	Arsenic and its compounds can be used in preservatives, pesticides, and defoliants for cotton, synthetic fibers, paints, inks, trims, and plastics.
Lead (Pb)*	7439-92-1			< 3 years < 0.2 mg/kg > 3 years < 1.0 mg/kg	< 0.2 mg/kg	May be associated with alloys, plastics, paints, inks, pigments and surface coatings.
Chromium (Cr)	7440-47-3	GOTS		< 3 years < 1.0 mg/kg > 3 years < 2.0 mg/kg	< 1 mg/kg	Chromium compounds can be used as dyeing additives; dye-fixing agents; color-fastness after- treatmnts; dyes for wool, silk, and polyamide (especially dark shades); and leather tanning.
Cobalt (Co)	7440-48-4			< 3 years < 1.0 mg/kg > 3 years < 4.0 mg/kg	< 1.0 mg/kg	Cobalt and its compounds can be used in alloys, pigments, dyestuff, and the production of plastic buttons.
Copper (Cu)**	7440-50-8			< 3 years < 25.0 mg/kg > 3 years < 50.0 mg/kg	< 25.0 mg/kg	Copper and its compounds can be found in alloys and pigments, and in textiles as an antimicrobial agent.
Mercury (Hg)	7439-97-6			< 0.02 mg/kg	< 0.02 mg/kg	Mercury compounds can be present in pesticides and as contaminants in caustic soda (NaOH). They may also be used in paints and as catalysts in the manufacture of PU and vinyl chloride for use in PVC.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
HEAVY METALS EXTRACTABLE CONTINUED						
Nickel (Ni)	7440-02--0	GOTS	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	< 1.0 mg/kg	< 1 mg/kg	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.
Selenium (Se)	7782-49-2			< 500 mg/kg	< 0.2 mg/kg	May be found in synthetic fibres, paints, inks, plastics and metal trims.
Tin (Sn)	7440-31-5				< 2 mg/kg	Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer.
Manganese (Mn)	7439-96-5				< 90 mg/kg	
Zinc (Zn)	7440-66-6				< 750 mg/kg	
APPLICABLE FOR TEXTILES						
Chromium VI (Cr VI)	18540-29-9	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12	Textiles: DIN EN 16711-2:2016 with EN ISO 17075-1:2017 if Cr is detected	< 1 mg/kg	< 0.5 mg/kg	Though typically associated with leather tanning, Chromium VI also may be used in the “after-chroming” process for wool dyeing (Chrome salts applied to acid-dyed wool to improve fastness).
APPLICABLE FOR LEATHER						
Chromium VI (Cr VI)	18540-29-9	EU: REACH Regulation 1907/2006 ANNEX XVII entry No.47	Leather: EN ISO 17075-1:2017 and EN ISO 17075-2:2017 for confirmation in case the extract causes interference. Alternatively, EN ISO 17075-2:2017 may be used on its own. Ageing test: ISO 10195:2018 Method A2	Not detected Detection limit < 3 mg/kg	Legal requirement	Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
HEAVY METALS JEWELRY						
Antimony (Sb)	7440-36-0		ASTM F963-17 as referenced in ASTM F2923:2020	Paints and coatings: Extractable < 60 mg/kg	N.A	Antimony and its compounds can be used as a Flame Retardant in paints, as well as a colorant in pigments.
Arsenic (As)	7440-38-2			Paints and coatings: Extractable < 25 mg/kg		Arsenic and its compounds can be used in paints and inks.
Barium (Ba)	7440-39-3			Paints and coatings: Extractable < 1000 mg/kg		Barium and its compounds can beused in pigments for inks.
Cadmium (Cd)	7440-43-9	EU: REACH Regulation 1907/2006 Annex XVII entry No.23		Substrates, Paints and Coatings: Total: > 3 years: < 75 mg/kg < 3 years: < 40 mg/kg		Cadmium and its compounds are used as pigments (especially in red, orange, yellow, and green). It can also be used in alloys to improve hardness or be found as a contaminant.
Chromium (Cr)	7440-47-3			Paints and coatings: Extractable < 60 mg/kg		Chromium and its compounds can be used as pigments in paints. It can also be used as part of alloys such as stainless steel.
Lead (Pb)	7439-92-1	EU: REACH Regulation 1907/2006 Annex XVII entry No 63 for individual part of jewelry articles		Substrates, Paints and Coatings: Total: < 90 mg/kg		Lead and its compounds may be associated with plastics, paints, inks, pigments, and surface coatings. It can also be found in metals as a contaminant. Crystal or “lead glass” is exempt from total Lead restrictions.
Mercury (Hg)	7439-97-6			Paints and coatings: Extractable < 60 mg/kg		Mercury and its compounds may be used in paints and can be found as a contaminant in alloys and in gold due to its use during the extraction process.
Nickel (Ni)	7440-02-0	EU: REACH Regulation 1907/2006 Annex XVII entry No.27	EN 12472:2020 and EN 1811:2023	Release (metal parts): Prolonged skin contact: 0.5 µg/cm²/week Pierced part: 0.2 µg/cm²/week		Nickel and its compounds can be used for plating alloys and improving the corrosion resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.
Selenium (Se)	7782-49-2		ASTM F963-17 as referenced in ASTM F2923:2020	Paints and coatings: Extractable < 500 mg/kg		Selenium and its compounds may be found in paints and inks.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
HEAVY METALS RELEASABLE NICKEL						
Nickel	7440-02-0	EU:REACH Regulation 1907/2006 ANNEX XVII entry No.27	Nickel release: EN 1811:2023 Abrasion of coated items: EN 12472:2020	Consumer goods such as jewellery intented to be used for body piercings must not release more than 0.2 µg nickel per cm² per week.	< 0.5 µg/cm2/week	Nickel and its compounds can be used for plating alloys and improving corrosion resistance and hardness of alloys. They can also occur as impurities in pigments and alloys.
				Consumer goods such as jewellery, snap fasteners, press buttons, zip fasteners, etc., which can come into contact with the human skin for a longer period must not release more than 0.5 µg nickel per cm² per week.		
			EN 16128: 2015	In spectacle frames and sunglasses intended to come into close and prolonged contact with the skin must not release more than ≤ 0.5 µg nickel per cm² per week		

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
HEAVY METALS TOTAL CONTENT						
Cadmium and its compounds	7440-43-9	EU: REACH Regulation 1907/2006 ANNEX XVII entry No.23	All materials except Leather: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2019	< 60 mg/kg	< 40 mg/kg	Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer.
Lead and its compounds	7439-92-1	EU: REACH Regulation 1907/2006 ANNEX XVII entry No.63	Non-metal: CPSC-CH-E1002-08.3 Metal: CPSC-CH-E1001-08.3 Lead in paint and surface coatings: CPSIA Section 101 16 CFR 1303	< 200 mg/kg	< 50 mg/kg	
Arsenic (As)	7440-38-2		All materials except Leather: DIN EN 16711-1:2016 Leather: DIN EN ISO 17072-2:2019	< 100 mg/kg	Prohibited	
Mercury (Hg)	7439-97-6	EU:REACH Regulation 1907/2006 ANNEX XVII entry No.62		< 0.5 mg/kg		

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
MONOMERS						
Vinyl Chloride	75-01-4		EN ISO 6401:2022	< 1 mg/kg	Prohibited	Vinyl Chloride is a precursor for polymerization and may be present in various PVC materials like prints, coatings, flip flops, and synthetic leather.
Styrene, Free	100-42-5		Extraction in Methanol GC/MS, sonication at 60 degrees C for 60 minutes	< 500 mg/kg		Styrene is a precursor for polymerization and may be present in various Styrene copolymers like plastic buttons. Free styrene is restricted, not total styrene.
N-NITROSAMINES						
N-nitrosodimethylamine (NDMA)	62-75-9		EN ISO19577:2019 with LC/MS/MS verification if positive	< 0.5 mg/kg each	Prohibited	Can be formed as by-product in the production of rubber.
N-nitrosodiethylamine (NDEA)	55-18-5					
N-nitrosodipropylamine (NDPA)	621-64-7					
N-nitrosodibutylamine (NDBA)	924-16-3					
N-nitrosopiperidine (NPIP)	100-75-4					
N-nitrosopyrrolidine (NPYR)	930-55-2					
N-nitrosomorpholine (NMOR)	59-89-2					
N-nitroso N-methyl N-phenylamine (NMPhA	614-00-6					
N-nitroso N-ethyl N-phenylamine (NEPhA)	612-64-6					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
ORGANOTIN COMPOUNDS						
Tributyltin (TBT)	Various	EU: Regulation 1907/2006 REACH ANNEX XVII entry No.20	All materials: CEN ISO/TS 16179:2012 or EN ISO 22744-1:2020	< 0.5 mg/kg	< 0.05 mg/kg	Class of chemicals combining tin and organics such as butyl and phenyl groups that should no longer be used in the production of apparel, footwear, and related products. Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g., antibacterials), catalysts in plastic and glue production, and heat stabilizers in plastics/rubber. In textiles and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.
Triphenyltin (TPhT)	Various					
Dibutyltin (DBT)	Various			< 1 mg/kg each	MBT, DMT, DPT, MoT, MMT, MPhT, TeBT, TCyHT, TMT, TOT, TPT, DphT, TeET, TeOT < 0.1 mg/kg	
Dioctyltin (DOT)	Various					
Monobutyltin (MBT)	Various					
Monooctyltin (MOT)	Various					
Tricyclohexyltin (TCyHT)	Various					
Trioctyltin (TOT)	Various					
Tripropyltin (TPT)	Various					
Trimethyltin (TMT)	Various					
Dimethyltin (DMT)	Various					
Diphenyltin (DPhT)	Various					
Dipropyltin (DPT)	Various					
Monomethyltin (MMT)	Various					
Monophenyltin (MPhT)	Various					
Tetrabutyltin (TeBT)	Various					
Tetraethyltin (TeET)	Various					
Tetraoctyltin (TeOT)	Various					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
ORTHO-PHENYLPHENOL (OPP)						
Ortho-phenylphenol (OPP)	90-43-7		All materials: EN 17134-2:2023	< 1000 mg/kg	< 1 mg/kg	OPP is used for its preservative properties in leather or as a carrier in polyester dyeing processes.
OTHER RESTRICTED CHEMICALS						
Aniline	62-53-3	GOTS	EN 14362-1:2017 (Textiles)		Aniline, free < 20 mg/kg	Some AZO colorants can separate the aromatic amine aniline under reductive conditions. Aniline is signalized, amongst others, with “Suspected of causing cancer” and “Suspected of causing genetic defects” by ECHA. Aniline: is also a (free) residue in Indigo; Indigo is produced from Aniline and Cyanic acid (HCN)
OZONE DEPLETING SUBSTANCES						
Ozone depleting substances	Various	Regulation (EU) 2024/590	All materials: GC/MS headspace 120° C for 45 minutes	< 5 mg/kg	Prohibited	Prohibited from use. Ozone-depleting substances have been used as a foaming agent in PU foams as well as a dry-cleaning agent.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS)* (SEE APPENDIX A FOR INDIVIDUAL SUBSTANCES)						
NO INTENTIONAL USE ALLOWED						
All PFAS as measured by total fluorine (tf)	Various		EN 14582:2016	< 100 mg/kg		
Perfluorooctane Sulfonate (PFOS) and its salts	Various	EU: Regulation 2019/1021 on Persistant Organic Pollutants	All materials except leather: EN 17681-1:2025 & EN 17681-2:2022 Leather: EN ISO 23702-1:2023	< 0.025 mg/kg total	Me-PFOA, Et-PFOA: < 0.025 mg/kg PFOS and PFAS C9-C14: < 0.025 mg/kg C9-C14 related PFAS: < 0.1 mg/kg FTOH: < 0.01 mg/kg	Regulations around the world ban the use of PFAS in apparel and footwear, with partial or full exemptions for personal protective equipment and outdoor apparel for severe wet conditions. PFAS may be used in commercial water-, oil- ,and stain-repellentagents as well as in breathable membranes that remove moisture, e.g., PTFE. *Refer to Appendix A for the full list of substances and CAS Numbers included in this restriction. Recycled products: Contact ZEEMAN about potential exemptions from the limit on total organic fluorine in recycled textile products. **Danish legislation banning PFAS is expected to be adopted from July 2025 with a transition period of one year. The ban would apply from July 2026.** **French law no. 2025-188 of February 27, 2025 banning PFAS in Textile products and footwear is to be adopted with a transition period of 10 months. The ban would apply from 1st January 2026.**
PFOS-related substances	Various			< 1 mg/kg total		
Perfluorooctanoic Acid (PFOA) and its salts	Various			< 0.025 mg/kg total		
PFOA-related substances	Various			< 1 mg/kg total		
Perfluorohexane-1-sulphonic acid (PFHxS) and its salts	Various			< 0.025 mg/kg total		
PFHxS-related substances	Various			< 1 mg/kg total		
C9-C14 Perfluorocarboxylic acids (PFCAs) and their salts	Various	EU: REACH Regulation 1907/2006 Annex XVII entry No.68		< 0.025 mg/kg total		
C9-C14 PFCA-related substances	Various			< 0.26 mg/kg total		
PFHxA and its salts	Various	EU: REACH Regulation 1907/2006 Annex XVII entry No.79		< 0.025 mg/kg total		
PFHxA-related substances	Various	**Going into force 10 October 2026**		< 1 mg/kg total		

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
PESTICIDES (SEE APPENDIX B FOR INDIVIDUAL SUBSTANCES)						
Refer to Appendix B for a a complete overview of the substances	Various	EU: Regulation 2019/1021 on Persistant Organic Pollutants	All materials: ISO 15913:2003 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	Not detected Detection limit 0.5 mg/kg	Pesticides, sum parameters: All natural fibres (except shorn wool): < 0.1 mg/kg Shorn wool: < 0.5 mg/kg	May be found in natural fibers, primarily cotton.

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
PHTHALATES						
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	EU: REACH Regulation 1907/2006 Annex XVII entry No. 51	Sample preparation for all materials: CPSC-CH-C1001-09.4 Measurement: Textiles: GC/MS, EN ISO 14389:2014 (8.1 Calculation based on weight of print only; 8.2 Calculation based on weight of print and textile if print cannot be removed). All materials except textiles: GC/MS	< 500 mg/kg each The sum of all Phthalates < 1000 mg/kg	Sum parameter: < 100 mg/kg	Esters of ortho-phthalic acid (Phthalates) are a class of organic compound commonly added to plastics to increase flexibility. They are sometimes used to facilitate the moulding of plastic by decreasing its melting temperature. Phthalates can be found in: • Flexible plastic components (e.g., PVC) • Print pastes • Adhesives • Plastic buttons • Plastic sleevings • Polymeric coatings The listed Phthalates are those most commonly used and regulated across industry sectors. Find more information about additional Phthalates on the REACH substances of very high concern (SVHC) candidate list, which is updated frequently. Other ortho-phthalates (like DPHP) may have similar toxicological characteristics to those listed. Before using any unlisted orthophthalates, please make sure to have a sound toxicology study from your chemical supplier.
Dibutyl phthalate (DBP)	84-74-2					
Butylbenzyl phthalate (BBP)	85-68-7					
Di-isobutyl phthalate (DIBP)	84-69-5					
Di-“isononyl” phthalate (DINP)	28553-12-0 68515-48-0	EU: REACH Regulation 1907/2006 Annex XVII entry No.52 a,b,c				
Di-“isodecyl phthalate (DIDP)	26761-40-0 68515-49-1					
Di-n-octyl phthalate (DNOP)	117-84-0					
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12				
Di-isopentylphthalate (DIPP)	605-50-5					
Di-n-pentyl phthalate (DPENP)	131-18-0					
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8					
Di-n-hexyl phthalate (DnHP)	84-75-3					
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear *	84777-06-0	The substances marked* are included in EU: REACH Regulation 1907/2006 SVHC Candidate List				
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)*	68515-42-4					
N-pentyl-isopentyl phthalate (NPIPP) *	776297- 69-9					
1,2- Benzenedicarboxylic acid. Dihexyl ester. Branched and linear (DHxP) *	68515-50-4					
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5) *	68515-51-5 68648-93-1					
Di-iso-hexylphthalate (DIHxP) *	71850-09-4					
Di-cyclohexylphthalate (DCHP) *	84-61-7					
Diethyl phthalate (DEP)	84-66-2					
Di-n-propylphthalate (DPrP)	131-16-8					
Dimethyl phthalate (DMP)	131-11-3					
Di-iso-octyl phthalate (DIOP)	27554-26-3					
Di-n-nonyl phthalate (DNP)	84-76-4					
Bis(2-ethylhexyl) tetrabromophthalate *	26040-51-7					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
POLYCHLORINATED AND HALOGENATED BIPHENYLS (PCBs) AND NAPHTHALENES (PCN)						
Halogenated biphenyls, including Polycholorinated biphenyl (PCB)	1336-36-3 and others	EU:Regulation 2019/1021 on Persistent Organic Pollutants SWITZERLAND: ORRChem annex 1.1 and 1.2 (Art.3)	Extraction following IEC 62321-6 (2015) // GC-MS	Not detected	Prohibited	PCBs and PCNs are persistent organic pollutants and have entered the environment through both use and disposal. PCBs and PCNs are used as plasticizers, pigments, adhesives, insecticides, flame retardants, water repellent finishes and as pesticide.
Halogenated naphthalenes, including Polychlorinated naphthalenes (PCN)	70776-03-3 and others					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)						
Benzo(a)pyrene [BaP]	50-32-8	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12 EU: REACH Regulation 1907/2006 Annex XVII entry No. 50	All materials: AFPS GS 2019 or EN 17132:2019 or ISO 16190:2021	PAH for childcare articles: < 0.5 mg/kg each Others: < 1mg/kg each The sum of 18 PAHs < 10 mg/kg	< 0.5 mg/kg each Sum of all 24 PAHs < 5 mg/kg	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. *Naphthalene: Dispersing agents for textile dyes may contain high residual naphthalene concentrations due to the use of low-quality Naphthalene derivatives (e.g., poorquality Naphthalene Sulphonate Formaldehyde condensation products).
Benzo(a)anthracene	56-55-3					
Chrysene	218-01-9					
Benzo(b)fluoranthene	205-99-2					
Benzo(k)fluoranthene	207-08-9					
Dibenzo(ah)anthracene	53-70-3					
Benzo(e)pyrene	192-97-2					
Benzo(j)fluoranthene	205-82-3					
Acenaphthene	83-32-9	GOTS		No individual restriction The sum of 18 PAHs < 10 mg/kg	< 1 mg/kg each Sum of all 24 PAHs < 5 mg/kg	
Acenaphthylene	208-96-8					
Fluorene	86-73-7					
Indeno(1,2,3-cd)pyrene	193-39-5					
Antracene	120-12-7	EU: Regulation 1907/2006 Candidate List				
Benzo(ghi)perylene	191-24-2					
Fluoranthene	206-44-0					
Naphthalene*	91-20-3					
Phenanthrene	85-01-8					
Pyrene	129-00-0					
Cyclopenta[c,d]pyrene	27208-37-3	GOTS				
Dibenzo[a,e]pyrene	192-65-4					
Dibenzo[a,h]pyrene	189-64-0					
Dibenzo[a,i]pyrene	189-55-9					
Dibenzo[a,l]pyrene	191-30-0					
1-Methylpyrene	2381-21-7					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
PVC AND LATEX						
Polyvinylchloride (PVC)	9002-86-2		Beilstein test/Infrared Spectroscopy (FTIR)	Usage ban	Prohibited	The use of PVC is voluntarily restricted because it is claimed that dioxins are produced as a byproduct of vinyl chloride manufacture and from burning of waste PVC.
Natural Rubber Latex	9006-04-06		DIN EN 455-3 (modified) Lowry method"			Latex is an aqueous dispersion of polymers that can be solidified into rubber.
QUINOLINE						
Quinoline	91-22-5	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12	All materials: DIN 54231:2022 with methanol extraction at 70 degrees C	< 50 mg/kg	Prohibited	Found as an impurity in polyester and some dyestuffs. Quinoline can be included with disperse dye testing, as the same method is used for both. It is not expected in non-dyed materials.
RESTRICTION ON PACKAGING						
Cadmium (Cd)	Various	EU: Regulation 2025/40 on packaging and and packaging waste repealing Directive 94/62/EC	CEN/TR 13695-1	The sum of concentration levels of lead, cadmium, mercury and hexavalent chromium present in packaging or packaging components shall not exceed 100 mg/kg	Must meet GOTS requirements	Packaging means transportation packaging as well as product packaging, i.e., any material used for the containment, protection, handling, delivery, and presentation of finished goods (article).
Lead (Pb)						
Chromium (Cr6+)— hexavalent						
Mercury (Hg)						
MOAH consisting of 1 to 7 aromatic rings		FRANCE: AGEC law, Article 112 of April 13, 2022 (reduction of certain critical compounds in printing inks for packaging	GC-FID/MS	< 0.1% and < 1 mg/kg MOAH compounds containing 3 to 7 aromatic rings		These mineral oils can be used in printing inks of packaging materials and recycled paper. The implementation applies to mineral oils containing substances that disrupt the recycling of packaging waste paper or restrict the use of recycled materials because of the risk of these substances to human health.
MOSH consisting of 16 to 35 carbon atoms				< 0.1%		
Suppliers should inform their contracted packaging and/or printing companies about the MOSH/MOAH restrictions in order that they determine, in consultation with printing ink manufacturers, the permissible printing inks (free of MOSH/MOAH) within the meaning of the Arrêté du 13 Avril 2022. A declaration of conformity, whilst not yet required, will be required in the future as part of the planned EU Packaging Regulation. As part of the duty of care as a manufacturer, random checks should be carried out on the printing inks used or the printed materials.						

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
SOLVENTS AND RESIDUALS						
Dimethylformamide (DMFa)	68-12-2	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12	Textiles: EN 17131:2019 All other materials: ISO 16189:2021	< 500 mg/kg	Additional materials and accessories: 0.05% by weight (< 500 mg/kg	Solvent used in plastics, rubber, and polyurethane (PU) coating. Water- based PU does not contain DMFa and is therefore preferable.
Dimethylacetamide (DMAC)	127-19-5			< 1000 mg/kg each		Solvent used in the production of elastane fibers and sometimes as substitute for DMFa.
N-Methyl-2-pyrrolidone (NMP)	872-50-4					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.
Formamide	75-12-7	EU: Regulation 1907/2006 Candidate List			Additional materials and accessories: 0.02% by weight (< 200 mg/kg)	Byproduct in the production of EVA foams.
UV ABSORBERS/STABILISERS						
UV 320	3846-71-7	EU: Regulation 1907/2006 Candidate List	ISO 24040:2022 with extraction in THF, analysis by GC/MS	< 1000 mg/kg each	Legal requirement	PU foam materials such as open cell foams for padding. Used as UV-absorbers for plastics (PVC, PET, PC, PA, ABS, and other polymers), rubber, polyurethane.
UV 327	3864-99-1					
UV 328	25973-55-1					
UV 350	36437-37-3					
Bumetrizole (UV-326)	3896-11-5					

ZEEMAN

RSL 9.0 (version May 2025)						
SUBSTANCE	**CAS NUMBER**	**REGULATION**	**TEST METHOD**	**ZEEMAN RESTRICTED LIMIT**	**GOTS REQUIREMENT VERSION 7.0**	**RELEVANCE OF RESTRICTION**
VOLATILE ORGANIC COMPOUNDS						
Benzene	71-43-2	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12	For general VOC screening: GC/MS headspace 45 minutes at 120 degrees C	< 5 mgkg	Aromatic and Halogenated solvents are prohibited	The VOCs listed here represent a broad range of potentially harmful substances that can be semiquantified using the prescribed headspace method. These substances should not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes such as solvent- based polyurethane coatings, glues/ adhesives, and polymer manufacturing. They should not be used for any kind of facility or spot cleaning. Individual VOCs should be reported if found > 100 mg/kg and confirmation testing may be required, especially for substances also included in other sections of the RSL with dedicated limits.
Volatile Organic Compounds (other) See Appendix C page 42 for a complete list	Various			< 500 mg/kg (total)		

ZEEMAN

Appendices RSL 9.0 (version May 2025)					
SUBSTANCE	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**
APPENDIX A. PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS)*					
PFOS and its Salts		**PFOA and Its Salts**		**PFHxS and its Salts**	
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	Perfluorooctanoic acid (PFOA)	335-67-1	Perfluorohexane Sulfonic acid (PFHxS)	355-46-4
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3	Sodium perfluorooctanoate (PFOA-Na)	335-95-5	Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	3871-99-6
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	Potassium perfluorooctanoate (PFOA-K)	2395-00-8	Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	55120-77-9
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)	29081-56-9	Silver perfluorooctanoate (PFOA-Ag)	335-93-3	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH4)	68259-08-5
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)	70225-14-8	Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	82382-12-5
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C2H5)4)	56773-42-3	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1		
Didecyldimethyl ammonium perfluorooctane sulfonate (PFOS-N(C10H21)2(CH3)2)	251099-16-8				
PFOS-related Substances		**PFOA-related Substances**		**PFHxS-related Substances**	
N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)	68259-15-4
N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	31506-32-8	Methyl perfluorooctanoate (Me-PFOA)	376-27-2	Perfluorohexane sulfonamide (PFHxSA)	41997-13-1
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2	Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5		
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-7	2-Perfluorooctylethanol (8:2 FTOH)	678-39-7		
Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9		
Perfluorooctane sulfonamide (PFOSA)	754-91-6	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9		
		2H,2H-Perfluorodecanoic acid (H2PFDA)	27854-31-5		

***NOTE: This list is a subset of PFAS and is not exhaustive**

Appendices RSL 9.0 (version May 2025)					
SUBSTANCE	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**
APPENDIX A. PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS)* CONTINUED					
C9 – C14 PFCAs and Their Salts		**C9 – C14 PFCA-related Substances**		**PFHxA and its Salts**	
Perfluorononanoic Acid (PFNA, C9-PFCA)	375-95-1	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5	Perfluorohexanoic Acid (PFHxA, C6-PFCA)	307-24-4
Perfluorodecanoic Acid (PFDA, C10-PFCA)	335-76-2	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	**PFHxA-related Substances**	
Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	2058-94-8	1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2
Perfluorododecanoic Acid (PFDoA, C12-PFCA)	307-55-1	2H,2H,3H,3H-Perufloroundecanoic acid (H4PFUnA)	34598-33-9	1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	647-42-7
Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)	72629-94-8	Perfluorocylethanol 8:2 (8:2 FTOH)	678-39-7	1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)	17527-29-6
Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	376-06-7	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8
Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6	1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0	***NOTE: This list is a subset of PFAS and is not exhaustive**	
		1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1		
		1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2		

ZEEMAN

Appendices RSL 9.0 (version May 2025)					
SUBSTANCE	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**
APPENDIX B. PESTICIDES, AGRICULTURAL					
2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds; 2,4,5-TP	93-72-1	Dichlorprop	120-36-5	Kepone	143-50-0
2,4,5-T	93-76-5	Dicofol	115-32-2	Lindane	58-89-9
2,4-D	94-75-7	Dicrotophos	141-66-2	Malathione	121-75-5
Aldrine	309-00-2	Dieldrine	60-57-1	MCPA	94-74-6
Azinophosmethyl	86-50-0	Dimethoate	60-51-5	MCPB	94-81-5
Azinophosethyl	2642-71-9	Dinoseb, Salts and Acetate	88-85-7	Mecoprop	93-65-2
Bromophos-ethyl	4824-78-6	DTTB (4, 6-Dichloro-7 (2,4,5-trichloro- phenoxy) -2-Trifluoro methyl benz imidazole)	63405-99-2	Metamidophos	10265-92-6
Captafol	2425-06-1	Endosulfan	115-29-7	Methoxychlor	72-43-5
Carbaryl	63-25-2	Endosulfan, α-	959-98-8	Mirex	2385-85-5
Chlorbenzilat	510-15-6	Endosulfan, β-	33213-65-9	Monocrotophos	6923-22-4
Chlordane	57-74-9	Endrine	72-20-8	Parathion-methyl	298-00-0
Chlordimeform	6164-98-3	Esfenvalerate	66230-04-4	Pentachloroanisole	1825-21-4
Chlorfenvinphos	470-90-6	Ethylendibromid	106-93-4	Phosdrin/Mevinphos	7786-34-7
Chlorthalonil	1897-45-6	Ethylparathione; Parathion	56-38-2	Perthane	72-56-0
Coumaphos	56-72-4	Fenvalerate	51630-58-1	Propethamphos	31218-83-4
Cyfluthrin	68359-37-5	Halogenated naphthalenes, including polychlorinated naphthalenes (PCNs)	Various	Profenophos	41198-08-7
Cyhalothrin	91465-08-6	Heptachlor	76-44-8	Quinalphos	13593-03-8
Cypermethrin	52315-07-8	Heptachlorepoxide	1024-57-3	Quintozene	82-68-8
S,S,S-Tributyl phosphorotrithioate (Tribufos)	78-48-8	Hexabromobiphenyl	36355-01-8	Strobane	8001-50-1
Deltamethrin	52918-63-5	a-Hexachlorcyclohexane with & without Lindane	319-84-6	TelodrinE	297-78-9
DDD	53-19-0 72-54-8	b-Hexachlorcyclohexane with & without Lindane	319-85-7	Toxaphene	8001-35-2
DDE	3424-82-6 72-55-9	g-Hexachlorcyclohexane with & without Lindane	319-86-8	Tolylfluanide	731-27-1
DDT	50-29-3 789-02-6	Hexachlorobenzene	118-74-1	Trifluralin	1582-09-8
Diazinon	333-41-5	Isodrine	465-73-6		
Dichlofluanide	1085-98-9	Kelevane	4234-79-1		

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Appendices RSL 9.0 (version May 2025)					
SUBSTANCE	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**	**SUBSTANCE**	**CAS NUMBER**
APPENDIX C. VOLATILE ORGANIC COMPOUNDS (VOCs)					
Volatile Organic Compounds (not included in other sections of the RSL with dedicated limits)				**Volatile Organic Compounds (included in other sections of the RSL with dedicated limits)**	
Carbon Disulfide	75-15-0	Bis(2-methoxyethyl)ether *	111-96-6	1,2-Dichlorobenzene	95-50-1
Carbon Tetrachloride	56-23-5	Isophorone	78-59-1	1,4-Dichlorobenzene	106-46-7
Chloroform	67-66-3	Phenol	108-95-2	1-Methyl-2-pyrrolidione *	872-50-4
1,1-Dichloroethylene	75-35-4	THF	109-99-9	2-phenyl-2-propanol	617-94-7
Pentachloroethane	76-01-7	1-bromopropane *	106-94-5	Acetophenone	98-86-2
1,1,1,2- Tetrachloroethane	630-20-6	1-PG2MEA 1-Propanol,2-methoxy-, acetate)	70657-70-4	Formamide *	75-12-7
1,1,2,2- Tetrachloroethane	79-34-5	2-(2-Methoxyethoxy)ethanol	111-77-3	N,N-Dimethylacetamide (DMAC) *	127-19-5
1,1,1- Trichloroethane	71-55-6	2,4-toluene diisocyanate	584-84-9	Naphthalene	91-20-3
1,1,2- Trichloroethane	79-00-5	2-ethoxyethanol *	110-80-5	N-N-Dimethylformamide (DMFa) *	68-12-2
Orthoxylene	95-47-6	2-Methoxyethanol EGME (ethylene glycol monomethyl ether *	109-86-4	Styrene	100-42-5
Metaxylene	108-38-3	2-Methoxypropan-1-ol	1589-47-5	**Restricted Limit < 500 mg/kg each. See also page 38 in this RSL**	
Paraxylene	106-42-3	EGDME (Ethylene glycol dimethyl ether) *	110-71-4		
1,2,3-trichloropropane *	96-18-4	EGMEA (Ethylene glycol monomethyl ether acetate) *	110-49-6		
1,2,Dichloropropane	78-87-5	Hexachloroethane	67-72-1		
2-Ethoxyethyl acetate *	111-15-9	Merhylene chloride (dichloromethane)	75-09-2		
2-Ethylhexane acid	149-57-5	n-hexane	110-54-3		
Aniline	62-53-3	TEGDME (Triethylene glycol dimethyl ether) *	112-49-2		
The VOCs marked * are included in EU: REACH Regulation 1907/2006 SVHC Candidate List					

REACH ANNEX: ECHA'S CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN LAST UPDATE 21-01-2025
NUMBER OF SUBSTANCES ON THE CANDIDATE LIST: 247

The European Chemicals Agency (ECHA) "CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN FOR AUTHORISATION" can be accessed via the following link:
https://echa.europa.eu/candidate-list-table

The identification of a substance as a Substance of Very High Concern (SVHC) and its inclusion in the Candidate List is the first step of the authorisation procedure.
Companies may have immediate legal obligations following such inclusion which are linked to the listed substance on its own, in preparations and articles.
Specific obligations exist for importers, producers, and suppliers (regardless of geographical location) of any article that contains one or more of these substances above 0.1 percent by weight per component (>1000 mg/kg)[1] These obligations include:

•Notify ECHA if the substance(s) are present in article components above 0.1 percent in quantities totalling over one ton per producer or importer per year [2] and register the products in the SCIP database.
•Notify Zeeman immediately and provide sufficient information to allow safe use of the article to Zeeman and other clients.
•Provide sufficient information, upon request, to allow safe use of the article to a consumer within 45 days of receipt of the request.

Some substances included in the Candidate List may also appear in other sections of the RSL with different limits under REACH Annex XVII. In this case, the lowest (strictest) limit always applies.

[1] European Court of Justice judgement of 10-09-2015 case C-106/14 referring to every constituent part of the article

[2] Notification is not required if the substance has already been registered for that use or when the producer or importer of an article can exclude exposure of humans and the environment during the use and disposal of the article. In such cases, the producer or importer must supply appropriate instructions to the recipient of the article.

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
1	reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	192268-65-8	21-01-2025	PBT (Article 57d)
2	Perfluamine	338-83-0	21-01-2025	vPvB (Article 57e)
3	Octamethyltrisiloxane	107-51-7	21-01-2025	vPvB (Article 57e)
4	O,O,O-triphenyl phosphorothioate	597-82-0	21-01-2025	PBT (Article 57d)
5	6-[(C10-C13)-alkyl-(branched, unsaturated)-2,5-dioxopyrrolidin-1-yl]hexanoic acid	2156592-54-8	21-01-2025	Toxic for reproduction (Article 57c)
6	Triphenyl phosphate	115-86-6	07-11-2024	Endocrine disrupting properties (Article 57(f) - environment)
7	Bis(α,α-dimethylbenzyl) peroxide	80-43-3	27-06-2024	Toxic for reproduction (Article 57 c)
8	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol Phenol, methylstyrenated	68512-30-1	2024/01/23	vPvB (Article 57e)
9	Bumetrizole	3896-11-5	2024/01/23	vPvB (Article 57e)

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REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
10	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	119344-86-4	2024/01/23	Toxic for reproduction (Article 57 c)
11	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol	3147-75-9	2024/01/23	vPvB (Article 57e)
12	2,4,6-tri-tert-butylphenol	732-26-3	2024/01/23	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
13	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	2023/06/14	Toxic for reproduction (Article 57c)
14	Bis(4-chlorophenyl) sulphone	80-07-9	2023/06/14	vPvB (Article 57e)
15	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	-	2023/01/17	vPvB (Article 57e)
16	Perfluoroheptanoic acid and its salts - Ammonium perfluoroheptanoate Potassium perfluoroheptanoate Perfluoroheptanoic acid Sodium perfluoroheptanoate	6130-43-4 21049-36-5 375-85-9 20109-59-5	2023/01/17	Toxic for reproduction (Article 57c) PBT (Article 57d) vPvB (Article 57e) Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health) Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
17	Melamine	108-78-1	2023/01/17	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health) Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
18	Isobutyl 4-hydroxybenzoate	4247-02-3	2023/01/17	Endocrine disrupting properties (Article 57(f) - human health)
19	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	2023/01/17	vPvB (Article 57e)
20	Barium diboron tetraoxide	13701-59-2	2023/01/17	Toxic for reproduction (Article 57c)
21	4,4'-sulphonyldiphenol	80-09-1	2023/01/17	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)
22	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	2023/01/17	Carcinogenic (Article 57a)
23	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]	37853-59-1	2023/01/17	vPvB (Article 57e)
24	N-(hydroxymethyl)acrylamide	924-42-5	2022/06/10	Carcinogenic (Article 57a) Mutagenic (Article 57b)
25	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	2022/01/17	Toxic for reproduction (Article 57c)
26	S-(tricyclo(5.2.1.0'2,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	2022/01/17	PBT (Article 57d)
27	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	2022/01/17	Toxic for reproduction (Article 57c)
28	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	2022/01/17	Endocrine disrupting properties (Article 57(f) - human health)

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
29	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	210555-94-5 27459-10-5 27147-75-7 121158-58-5 74499-35-7 57427-55-1	2021/07/08	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)
30	Orthoboric acid, sodium salt	25747-83-5 22454-04-2 14312-40-4 1333-73-9 13840-56-7 14890-53-0	2021/07/08	Toxic for reproduction (Article 57c)
31	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)	1372804-76-6 85535-85-9 - 198840-65-2	2021/07/08	PBT (Article 57d) vPvB (Article 57e)
32	Glutaral	111-30-8	2021/07/08	Respiratory sensitising properties (Article 57(f) - human health)
33	4,4'-(1-methylpropylidene)bisphenol	77-40-7	2021/07/08	Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)
34	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	75166-31-3 80-54-6 75166-30-2	2021/07/08	Toxic for reproduction (Article 57c)
35	2,2-bis(bromomethyl)propane1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	3296-90-0, 36483-57-5 1522-92-5 96-13-9	2021/07/08	Carcinogenic (Article 57a)
36	1,4-dioxane	123-91-1	2021/07/08	Carcinogenic (Article 57a) Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health) Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)

ZEEMAN

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
37	Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety dioctyltin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs. Dioctyltin dilaurate Stannane, dioctyl-, bis(coco acyloxy) derivs.	3648-18-8 91648-39-4	2021/01/19	Toxic for reproduction (Article 57c)
38	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	2021/01/19	Toxic for reproduction (Article 57c)
39	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	2020/06/25	Toxic for reproduction (Article 57c)
40	butyl 4-hydroxybenzoate	94-26-8	2020/06/25	Endocrine disrupting properties (Article 57(f) - human health)
41	2-methylimidazole	693-98-1	2020/06/25	Toxic for reproduction (Article 57c)
42	1-vinylimidazole	1072-63-5	2020/06/25	Toxic for reproduction (Article 57c)
43	Perfluorobutane sulfonic acid (PFBS) and its salts	-	2020/01/16	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health) Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
44	Diisohexyl phthalate	71850-09-4	2020/01/16	Toxic for reproduction (Article 57c)
45	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	2020/01/16	Toxic for reproduction (Article 57c)
46	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	2020/01/16	Toxic for reproduction (Article 57c)
47	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	-	2019/07/16	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health) Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)
48	2-methoxyethyl acetate	110-49-6	2019/07/16	Toxic for reproduction (Article 57c)
49	4-tert-butylphenol	98-54-4	2019/07/16	Endocrine disrupting properties (Article 57(f) - environment)
50	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	2019/07/16	Endocrine disrupting properties (Article 57(f) - environment)
51	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	2019/01/15	Endocrine disrupting properties (Article 57(f) - environment)
52	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	2019/01/15	Toxic for reproduction (Article 57c)
53	Benzo[k]fluoranthene	207-08-9	2019/01/15	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
54	Fluoranthene	206-44-0 93951-69-0	2019/01/15	PBT (Article 57d) vPvB (Article 57e)
55	Phenanthrene	85-01-8	2019/01/15	vPvB (Article 57e)
56	Pyrene	129-00-0 1718-52-1	2019/01/15	PBT (Article 57d) vPvB (Article 57e)
57	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride	552-30-7	2018/06/27	Respiratory sensitising properties (Article 57(f) - human health)

ZEEMAN

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
58	Benzo[ghi]perylene	191-24-2	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
59	Decamethylcyclopentasiloxane	541-02-6	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
60	Dicyclohexyl phthalate (DCHP)	84-61-7	2018/06/27	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - human health)
61	Disodium octaborate	12008-41-2	2018/06/27	Toxic for reproduction (Article 57c)
62	Dodecamethylcyclohexasiloxane	540-97-6	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
63	Ethylenediamine	107-15-3	2018/06/27	Respiratory sensitising properties (Article 57(f) - human health)
64	Lead	7439-92-1	2018/06/27	Toxic for reproduction (Article 57c)
65	Octamethylcyclotetrasiloxane	556-67-2	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
66	Terphenyl, hydrogenated	61788-32-7	2018/06/27	vPvB (Article 57e)
67	Benz[a]anthracene	56-55-3 1718-53-2	2018/01/15	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
68	Cadmium carbonate	513-78-0	2018/01/15	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
69	Cadmium hydroxide	21041-95-2	2018/01/15	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
70	Cadmium nitrate	10022-68-1 10325-94-7	2018/01/15	Carcinogenic (Article 57a) Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
71	Chrysene	218-01-9 1719-03-5	2018/01/15	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
72	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"TM) [covering any of its individual anti- and syn-isomers or any combination there of]	-	2018/01/15	vPvB (Article 57e)
73	fluoranthene	-	2018/01/15	Endocrine disrupting properties (Article 57(f) - environment)
74	Perfluorohexane-1-sulphonic acid and its salts	-	2017/07/07	vPvB (Article 57e)

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
75	4,4'-isopropylidenediphenol Bisphenol A; BPA	80-05-7	2017/01/12	Toxic for reproduction (Article 57 c)
76	4-heptylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	-	2017/01/12	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
77	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3830-45-3 3108-42-7 335-76-2	2017/01/12	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
78	p-(1,1-dimethylpropyl)phenol	80-46-6	2017/01/12	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
79	Benzo{def}chrysene	50-32-8	2016/20/06	Carcinogenic (Article 57a): Mutagenic (Article 57b); Toxic for reproduction (Article 57c); PBT (Article 57 d); vPvB (Article 57 e)
80	1,3-propanesultone	1120-71-4	2015/12/17	Carcinogenic (Article 57a);
81	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	2015/12/17	vPvB (Article 57e)
82	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	2015/12/17	vPvB (Article 57e)
83	Nitrobenzene	98-95-3	2015/12/17	Toxic for reproduction (Article 57 c)
84	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	2015/12/17	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
85	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1	2015/06/15	Toxic for reproduction (Article 57 c)
86	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	2015/06/15	vPvB (Article 57e)
87	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	2014/12/17; 2008/10/28	Equivalent level of concern having probable serious effects to the environment (Article 57 f); Toxic for reproduction (article 57c)
88	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	2014/12/17	Toxic for reproduction (Article 57 c)
89	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)
90	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	2014/12/17	Toxic for reproduction (Article 57 c)

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REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
91	Cadmium fluoride	7790-79-6	2014/12/17	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
92	Cadmium sulphate	10124-36-4 31119-53-6	2014/12/17	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
93	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)
94	Cadmium chloride	10108-64-2	2014/06/16	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
95	Sodium peroxometaborate	7632-04-40	2014/06/16	Toxic for reproduction (Article 57 c)
96	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	2014/06/16	Toxic for reproduction (Article 57 c)
97	Sodium perborate; perboric acid, sodium salt	-	2014/06/16	Toxic for reproduction (Article 57 c)
98	Trixylyl phosphate	25155-23-1	2013/12/16	Toxic for reproduction (Article 57 c);
99	Lead di(acetate)	301-04-2	2013/12/16	Toxic for reproduction (Article 57 c);
100	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	2013/12/16	Toxic for reproduction (Article 57 c);
101	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	2013/12/16	Carcinogenic (Article 57a);
102	Cadmium sulphide	1306-23-6	2013/12/16	Carcinogenic (Article 57a);
103	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	2013/12/16	Carcinogenic (Article 57a);
104	Dihexyl phthalate	84-75-3	2013/12/16	Toxic for reproduction (Article 57 c);
105	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	2013/06/20	Toxic for reproduction (Article 57 c);
106	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	2013/06/20	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
107	Pentadecafluorooctanoic acid (PFOA)	335-67-1	2013/06/20	Toxic for reproduction (Article 57 c);
108	Dipentyl phthalate (DPP)	131-18-0	2013/06/20	Toxic for reproduction (Article 57 c);
109	Cadmium	7440-43-9	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
110	Cadmium oxide	1306-19-0	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
111	4,4'-methylenedi-o-toluidine	838-88-0	2012/12/19	Carcinogenic (Article 57a)
112	N-pentyl-isopentylphthalate	776297-69-9	2012/12/19	Toxic for reproduction (Article 57 c)

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
113	4-Aminoazobenzene	60-09-3	2012/12/19	Carcinogenic (Article 57a)
114	Orange lead (lead tetroxide)	1314-41-6	2012/12/19	Toxic for reproduction (Article 57 c)
115	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	2012/12/19	Toxic for reproduction (Article 57 c)
116	Dimethyl sulphate	77-78-1	2012/12/19	Carcinogenic (Article 57a)
117	Heptacosafluorotetradecanoic acid	376-06-7	2012/12/19	vPvB (Article 57 e)
118	Lead titanium zirconium oxide	12626-81-2	2012/12/19	Toxic for reproduction (Article 57 c)
119	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	2012/12/19	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
120	6-methoxy-m-toluidine (p-cresidine)	120-71-8	2012/12/19	Carcinogenic (Article 57a)
121	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	2012/12/19	Toxic for reproduction (Article 57 c)
122	1,2-Diethoxyethane	629-14-1	2012/12/19	Toxic for reproduction (Article 57 c)
123	Sulfurous acid, lead salt, dibasic	62229-08-7	2012/12/19	Toxic for reproduction (Article 57 c)
124	1-bromopropane (n-propyl bromide)	106-94-5	2012/12/19	Toxic for reproduction (Article 57 c)
125	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	2012/12/19	PBT (Article 57 d); vPvB (Article 57 e)
126	Biphenyl-4-ylamine	92-67-1	2012/12/19	Carcinogenic (Article 57a)
127	Pentalead tetraoxide sulphate	12065-90-6	2012/12/19	Toxic for reproduction (Article 57 c)
128	Silicic acid, lead salt	11120-22-2	2012/12/19	Toxic for reproduction (Article 57 c)
129	o-Toluidine	95-53-4	2012/12/19	Carcinogenic (Article 57a)
130	Acetic acid, lead salt, basic	51404-69-4	2012/12/19	Toxic for reproduction (Article 57 c)
131	Dioxobis(stearato)trilead	12578-12-0	2012/12/19	Toxic for reproduction (Article 57 c)
132	Lead bis(tetrafluoroborate)	13814-96-5	2012/12/19	Toxic for reproduction (Article 57 c)
133	Lead dinitrate	10099-74-8	2012/12/19	Toxic for reproduction (Article 57 c)
134	Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	68784-75-8	2012/12/19	Toxic for reproduction (Article 57 c)
135	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7 13149-00-3 14166-21-3	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
136	N-methylacetamide	79-16-3	2012/12/19	Toxic for reproduction (Article 57 c)
137	Pyrochlore, antimony lead yellow	8012-00-8	2012/12/19	Toxic for reproduction (Article 57 c)
138	Lead monoxide (lead oxide)	1317-36-8	2012/12/19	Toxic for reproduction (Article 57 c)
139	Tetralead trioxide sulphate	12202-17-4	2012/12/19	Toxic for reproduction (Article 57 c)
140	Trilead bis(carbonate)dihydroxide	1319-46-6	2012/12/19	Toxic for reproduction (Article 57 c)
141	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
142	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	2012/12/19	Toxic for reproduction (Article 57 c)
143	N,N-dimethylformamide	68-12-2	2012/12/19	Toxic for reproduction (Article 57 c)
144	Tetraethyllead	78-00-2	2012/12/19	Toxic for reproduction (Article 57 c)
145	Methyloxirane (Propylene oxide)	75-56-9	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
146	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	2012/12/19	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
147	Fatty acids, C16-18, lead salts	91031-62-8	2012/12/19	Toxic for reproduction (Article 57 c)
148	Trilead dioxide phosphonate	12141-20-7	2012/12/19	Toxic for reproduction (Article 57 c)
149	o-aminoazotoluene	97-56-3	2012/12/19	Carcinogenic (Article 57a)
150	[Phthalato(2-)]dioxotrilead	69011-06-9	2012/12/19	Toxic for reproduction (Article 57 c)
151	Tricosafluorododecanoic acid	307-55-1	2012/12/19	vPvB (Article 57 e)
152	Lead oxide sulfate	12036-76-9	2012/12/19	Toxic for reproduction (Article 57 c)
153	Methoxyacetic acid	625-45-6	2012/12/19	Toxic for reproduction (Article 57 c)
154	Diisopentylphthalate	605-50-5	2012/12/19	Toxic for reproduction (Article 57 c)
155	Lead cyanamidate	20837-86-9	2012/12/19	Toxic for reproduction (Article 57 c)
156	4,4'-oxydianiline and its salts	101-80-4	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
157	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	2012/12/19	Carcinogenic (Article 57a)
158	Henicosafluoroundecanoic acid	2058-94-8	2012/12/19	vPvB (Article 57 e)
159	Furan	110-00-9	2012/12/19	Carcinogenic (Article 57a)
160	Pentacosafluorotridecanoic acid	72629-94-8	2012/12/19	vPvB (Article 57 e)
161	Diethyl sulphate	64-67-5	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
162	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0 19438-60-9 48122-14-1 57110-29-9	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
163	Dibutyltin dichloride (DBTC)	683-18-1	2012/12/19	Toxic for reproduction (Article 57 c)
164	Lead titanium trioxide	12060-00-3	2012/12/19	Toxic for reproduction (Article 57 c)
165	Formamide	75-12-7	2012/06/18	Toxic for reproduction (Article 57 c)
166	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. 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	2012/06/18	Carcinogenic (Article 57a)
167	Diboron trioxide	1303-86-2	2012/06/18	Toxic for reproduction (Article 57 c)
168	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	2012/06/18	Carcinogenic (Article 57a)
169	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	2012/06/18	Toxic for reproduction (Article 57 c)
170	Lead(II) bis(methanesulfonate)	17570-76-2	2012/06/18	Toxic for reproduction (Article 57 c)

ZEEMAN

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
171	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	6786-83-0	2012/06/18	Carcinogenic (Article 57a)
172	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	2012/06/18	Mutagenic (Article 57b)
173	4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. 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	2012/06/18	Carcinogenic (Article 57a)
174	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	561-41-1	2012/06/18	Carcinogenic (Article 57a)
175	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	2012/06/18	Carcinogenic (Article 57a)
176	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	2012/06/18	Mutagenic (Article 57b)
177	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	2012/06/18	Toxic for reproduction (Article 57 c)
178	Lead styphnate	15245-44-0	2011/12/19	Toxic for reproduction (article 57 c)
179	Calcium arsenate	7778-44-1	2011/12/19	Carcinogenic (article 57 a)
180	Bis(2-methoxyethyl) ether	111-96-6	2011/12/19	Toxic for reproduction (article 57 c)
181	Phenolphthalein	77-09-8	2011/12/19	Carcinogenic (article 57 a)
182	Arsenic acid	7778-39-4	2011/12/19	Carcinogenic (article 57 a)
183	2-Methoxyaniline; o-Anisidine	90-04-0	2011/12/19	Carcinogenic (article 57 a)
184	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	2011/12/19	Carcinogenic (article 57 a)
185	Bis(2-methoxyethyl) phthalate	117-82-8	2011/12/19	Toxic for reproduction (article 57 c)
186	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	2011/12/19	Equivalent level of concern having probable serious effects to the environment (article 57 f)
187	Dichromium tris(chromate)	24613-89-6	2011/12/19	Carcinogenic (article 57 a)
188	Pentazinc chromate octahydroxide	49663-84-5	2011/12/19	Carcinogenic (article 57 a)
189	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight	-	2011/12/19	Carcinogenic (article 57 a)
190	Lead dipicrate	6477-64-1	2011/12/19	Toxic for reproduction (article 57 c)
191	N,N-dimethylacetamide	127-19-5	2011/12/19	Toxic for reproduction (article 57 c)

ZEEMAN

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
192	1,2-dichloroethane	107-06-2	2011/12/19	Carcinogenic (article 57 a)
193	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	2011/12/19	Carcinogenic (article 57 a)
194	Trilead diarsenate	3687-31-8	2011/12/19	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
195	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	2011/12/19	Carcinogenic (article 57 a)
196	Lead diazide, Lead azide	13424-46-9	2011/12/19	Toxic for reproduction (article 57 c),
197	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight		2011/12/19	Carcinogenic (article 57 a)
198	Cobalt dichloride	7646-79-9	2011/06/20 - 2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
199	1-Methyl-2-pyrrolidone	872-50-4	2011/06/20	Toxic for reproduction (article 57c)
200	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	2011/06/20	Toxic for reproduction (article 57c)
201	Hydrazine	302-01-2 7803-57-8	2011/06/20	Carcinogenic (article 57a)
202	1,2,3-Trichloropropane	96-18-4	2011/06/20	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
203	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	2011/06/20	Toxic for reproduction (article 57c)
204	Strontium chromate	7789-06-2	2011/06/20	Carcinogenic (article 57a)
205	2-Ethoxyethyl acetate	111-15-9	2011/06/20	Toxic for reproduction (article 57c)
206	2-Ethoxyethanol	110-80-5	2010/12/15	Toxic for reproduction (article 57c)
207	Cobalt(II) diacetate	71-48-7	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
208	Cobalt(II) carbonate	513-79-1	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
209	Cobalt(II) sulphate	10124-43-3	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
210	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	7738-94-5 13530-68-2	2010/12/15	Carcinogenic (article 57a)
211	Cobalt(II) dinitrate	10141-05-6	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
212	Chromium trioxide	1333-82-0	2010/12/15	Carcinogenic and mutagenic (articles 57 a and 57 b)
213	2-Methoxyethanol	109-86-4	2010/12/15	Toxic for reproduction (article 57c)
214	Trichloroethylene	79-01-6	2010/06/18	Carcinogenic (article 57 a)
215	Sodium chromate	7775-11-3	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)

ZEEMAN

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
216	Boric acid	10043-35-3 11113-50-1	2010/06/18	Toxic for reproduction (article 57 c)
217	Potassium chromate	7789-00-6	2010/06/18	Carcinogenic and mutagenic (articles 57 a and 57 b).
218	Tetraboron disodium heptaoxide, hydrate	12267-73-1	2010/06/18	Toxic for reproduction (article 57 c)
219	Potassium dichromate	7778-50-9	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
220	Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	2010/06/18	Toxic for reproduction (article 57 c)
221	Ammonium dichromate	7789-09-5	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
222	Acrylamide	79-06-1	2010/03/30	Carcinogenic and mutagenic (articles 57 a and 57 b)
223	2,4-Dinitrotoluene	121-14-2	2010/01/13	Carcinogenic (article 57a)
224	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
225	Anthracene oil, anthracene-low	90640-82-7	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
226	Pitch, coal tar, high temp.	65996-93-2	2010/01/13	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
227	Anthracene oil, anthracene paste	90640-81-6	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
228	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c))
229	Lead chromate	7758-97-6	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
230	Anthracene oil	90640-80-5	2010/01/13	Carcinogenic1, PBT and vPvB (articles 57a, 57d and 57e)
231	Diisobutyl phthalate	84-69-5	2010/01/13	Toxic for reproduction (article 57c)
232	Tris(2-chloroethyl)phosphate	115-96-8	2010/01/13	Toxic for reproduction (article 57c)
233	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
234	Anthracene oil, anthracene paste,distn. lights	91995-17-4	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
235	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	2008/10/28	Carcinogenic (article 57a)
236	Triethyl arsenate	15606-95-8	2008/10/28	Carcinogenic (article 57a)
237	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	2008/10/28	vPvB (article 57e)
238	Benzyl butyl phthalate (BBP)	85-68-7	2008/10/28	Toxic for reproduction (article 57c)
239	Sodium dichromate	7789-12-0 10588-01-9	2008/10/28	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
240	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	2008/10/28	PBT and vPvB (articles 57 d and 57 e)
241	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	2008/10/28	PBT (article 57d)
242	Anthracene	120-12-7	2008/10/28	PBT (article 57d)
243	Dibutyl phthalate (DBP)	84-74-2	2008/10/28	Toxic for reproduction (article 57c)
244	Lead hydrogen arsenate	7784-40-9	2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)

REACH Candidate List RSL 9.0 (version May 2025)				
No.	**Substance Name**	**Cas Number**	**Date of inclusion**	**Reason for inclusion**
245	Diarsenic trioxide	1327-53-3	2008/10/28	Carcinogenic (article 57a)
246	Diarsenic pentaoxide	1303-28-2	2008/10/28	Carcinogenic (article 57a)
247	Bis(tributyltin)oxide (TBTO)	56-35-9	2008/10/28	PBT (article 57d)

GOTS material input requirements RSL 9.0	
3. GOTS Material input requirements	
3.1 Organic Fibre Content	
3.1.1: Only organic certified fibres as defined in Section 2.1 of the GOTS manual V7 shall be used in GOTS Goods.	
3.2 Additional Fibre Materials	
3.2.3 Requirements for additional fibre materials	
Additional Fibre Materials	**Criteria**
Fibre material types accepted for the remaining uncertified balance of the product material composition (max. 5% according to Section 3.2.1 and max. 30% according to Section 3.2.2)	Allowed additional fibre materials may be blended with the organic or Organic in-conversion fibres at any processing stage. Blending organic fibres with Organic in-conversion or with conventional fibres of the same type in the same product is not permitted. All additional materials shall meet the limit values for residues as listed in Section 5.2.8. The requirements outlined in Sections 2.1.4 and 2.1.5 apply to this section as well (GOTS manual V7). **Allowed are:** **Natural vegetable or animal fibres, regenerated fibres, other:** Individually or in combination as a sum total up to 30% (≤30%): a) non-GMO conventional, virgin or recycled natural vegetable fibres b) non-GMO conventional, virgin or recycled animal fibres c) Lyocell or protein-based fibres derived from non-GMO sources and from certified organic raw materials or pre- or post-consumer waste or from raw materials certified according to a programme that verifies compliance with sustainable management principles

GOTS material input requirements RSL 9.0	
3.2.3 Requirements for additional fibre materials	
Fibre material types accepted for the remaining uncertified balance of the product material composition (max. 5% according to Section 3.2.1 and max. 30% according to Section 3.2.2)	d) Organic, mechanically recycled natural vegetable or animal fibres derived from Pre-consumer Waste of GOTS Goods (intermediate or finished) e) PLA (polylactic acid) fibre produced from non-GMO bio-mass sources Recycled synthetic (polymer) fibres: Individualaly or in combination as a sum total up to 20% (≤20%): a)derived from pre- or post-consumer waste: only polyester, polyamide, polypropylene, elastomultiester (elasterell-p) and polyurethane (elastane) Regenerated fibres, virgin synthetic (polymer) fibres, other: Individually or in combination as a sum total up to 10% (≤10%): a) regenerated fibres like lyocell, viscose or modal: raw materials used shall be non-GMO b) virgin synthetic (polymer) fibres: only polyamide, polypropylene, elastomultiester (elasterell-p) and polyurethane (elastane) c) stainless steel fibres and mineral fibres Prohibited fibre types (miscellaneous): a) conventional cotton (virgin, recycled, non GMO) b) conventional angora hair fibre c) virgin polyester d) acrylic e) asbestos, carbon and silver fibres f) any other not explicitly permitted fibres g) mulesed wool

GOTS material input requirements RSL 9.0	
3.3 Requirements for accessories	
Accessories	**Criteria**
Material in general (valid for appliqué, borders, buckles, buttons and press- studs, cords, edgings, elastic bands and yarns, embroidery yarns, fasteners and closing systems, adhesive tapes used for fusing, hatbands, lace used as decoration, linings, inlays, interface, labels (heat-transfer/ adhesive/ care/ GOTS), interlinings, pockets, seam bindings, sewing threads, shoulder pads, padding for undergarments, trims, zippers, soles in footwear and any other, not below explicitly listed accessories)	**Allowed are:** a) natural materials including biotic material (such as (organic or conventional) natural fibre, wood, leather, horn, bone, shell) and non-biotic material (such as minerals, metals, stone) b) regenerated and synthetic materials **Prohibited is the use of:** a) asbestos b) carbon fibres c) silver (filament, treated) fibres d) chromium (e.g. as component of a metal or in leather tanning,vexcept that stainless steel is permitted) e) nickel (e.g. as component of a metal, except that stainless steel is permitted) f) material from threatened animals, plant and timber g) Chlorinated plastics (e.g. PVC) All materials used for accessories shall meet the applicable limit values for residues as listed in Section 5.2.8 (GOTS Manual V7)
Fillings, stuffing	For textile fibre use (textile fibres used as fillings are not considered as Accessories): allowed are textile fibre materials certified to organic or Organic in-conversion. For non-textile material use: only Natural Materials are permitted and shall be from certified organic or Organic in-conversion production in case such certification is applicable for the kind of material used (e.g. for plant-based materials such as grain spelt or animal based-materials such as feathers). For latex foam use: Latex foam made from certified organic or Organic in-conversion latex or from latex certified according to a program that verifies compliance with sustainable forestry management principles.

GOTS chemical input criteria RSL version 9.0

4.2 GOTS Chemical input criteria

4.2.1 Chemical management

A Certified Entity shall only use chemicals which are assessed, approved, and explicitly listed on the GOTS Positive List and shall have copies of valid Letter of Approvals and Safety Data Sheet documents on hand listing all Preparations they are using in processing and manufacturing of GOTS Goods as verification proof that all colourants and textile auxiliaries used for GOTS Goods are approved.

All chemical Inputs (Substances and Preparations) intended to be used to process GOTS Goods shall undergo an assessment procedure prior to approval before their usage.

A chemical Input assessment procedure shall be conducted by an Approved Certifier who is authorised by the Global Standard gGmbH for the specific accreditation scope, namely, Scope 4: Approval of Dyes and Textile Auxiliary Agents (Chemical Inputs) on GOTS Positive List.

Application for approval shall be made by the applicable chemical producer or supplier of the chemical Inputs who may receive conformity documents (Letters of Approval) issued by the authorised, Approved Certifiers and containing the trade names of applied chemical Inputs that have been found to be compliant with the criteria of GOTS.

For the approval of all chemical Inputs (Substances and Preparations), a Safety Data Sheet (SDS), prepared according to an applicable recognised norm or directive, shall be available.

The Approved Certifiers should, where appropriate and felt necessary, include further sources of information (such as additional toxicological and environmental data on specific components of the auxiliary agents, test reports, independent lab analysis and traceability checks of ingredients, no intentional use declarations, sources of data for hazard & toxicity, etc.) in the assessment.

All chemical Inputs shall have been evaluated, and their trade names shall be listed on the GOTS Positive List, available on the GOTS website.

4.2.2 GOTS Prohibited and restricted inputs

The following table lists chemical inputs that may (potentially) be used in conventional textile processing but that are explicitly banned or restricted for environmental and/or toxicological reasons in all processing stages of GOTS goods. Prohibition or restriction of substance groups or individual substances that are not explicitly listed in this Section may further result from section 4.2.3 'Requirements related to hazards and toxicity' or from other criteria mentioned in the GOTS standard. Download the manual for the implementation of GOTS version 7 from the GOTS website.
Substances and preparations listed in regulation EC 552/2009 (amending regulation EC 1907/2006 (REACH), annex XVII), EC 2019/1021 (Persistant Organic Pollutants), and the 'candidate list of substances of very high concern for authorisation' of the European Chemicals Agency (ECHA) are prohibited.

https://global-standard.org/images/resource-library/documents/standard-and-manual/Manual_for_the_Implementation_of_GOTS_V7.0__SIGNED_.pdf

GOTS chemical input criteria RSL version 9.0	
4.2.2.3 Prohibited and restricted inputs	
Substance Group	**Criteria**
Aromatic and/or halogenated solvents	Prohibited
Flame retardants	Prohibited are - Chlorinated flame retardants - Brominated flame retardants - Phosphate based flame retardants, listed in Manual - Flame retardants containing Antimony or Antimony Trioxide - Disodium octaborate
Chlorinated benzenes and toluenes	Prohibited
Chlorophenols (including their salts and esters)	Prohibited (such as mono, di, tri, tetra and penta- chlorophenols)
Complexing agents and surfactants	Prohibited are: • all APs and APEOs (i.e. NP, OP, NPEO, OPEO, APEOs terminated with functional groups, APEO-polymers) • EDTA, DTPA, NTA • LAS, α-MES
Endocrine disruptors	Prohibited
Formaldehyde and other short- chain aldehydes	Prohibited are inputs that contain or generate formaldehyde or other short-chain aldehydes (like glyoxal) during designated application
Glycol Derivatives	Prohibited are the glycol derivatives listed in the implementation Manual V7.0
Genetically modified organisms (GMO)	Prohibited are all inputs that: • contain GMO • contain enzymes derived from GMO • are made from GMO raw materials (e.g. starch, surfactants or oils from GM plants) • contain GMO based traceability markers
Heavy metals	Prohibited. Inputs shall be 'heavy metal free'. Impurities shall not exceed the limit values as defined in Section 7. Exceptions valid for dyes and pigments are set in Sections 4.2.6.6 and 4.2.6.7.
Inputs (e.g. azo dyes and pigments) releasing carcinogenic arylamine compounds (MAK III, category 1,2,3,4)	Prohibited

GOTS chemical input criteria RSL version 9.0	
4.2.2.3 Prohibited and restricted inputs	
Substance Group	**Criteria**
Inputs containing functional nanoparticles (= particles with a size < 100 nm)	Prohibited
Inputs with halogen containing compounds	Prohibited are inputs that contain > 1% permanent AOX. Exceptions valid for pigments are set in Section 4.2.6.7.
Organotin compounds	Prohibited (such as DBT, DMT, DOT, DPhT, DPT, MBT, MMT, MOT, MPhT, TBT, TCyHT, TeBT, TeET, TMT, TOT, TPhT, TPT)
Plasticizers	Prohibited are: PAH, phthalates and esters of phthalic acid, Bisphenol A and all other plasticizers with endocrine disrupting potential
Per- and Polyfluoroalkyl substances (PFAS)	Prohibited are all PFAS compounds including PFCA (incl. PFOA), PFSA (incl. PFOS) FTOH, PFNA, PFHpA, PFDA, PFOSA, PTFE
Quaternary ammonium compounds	Prohibited are: DTDMAC, DSDMAC and DHTDMAC
Chlorinated Paraffins: Short-chain chlorinated paraffins (SCCPs, C10-13) Medium-chain chlorinated paraffins (MCCPs, C14-17)	Prohibited
Cyclic Siloxanes (D4, D5, D6)	D4: Prohibited are inputs above the classification limit of 0.025% (250 mg/kg) D5,D6: Prohibited are inputs that contain ≥1000 mg/kg
Substances and preparations that are prohibited for application in textiles with a recognised internationally or a nationally valid legal character	Prohibited
Substances and preparations having restrictions in usage for application in textiles with a recognised internationally or nationally legal character	The same restrictions apply, provided the substances and preparations are not already prohibited or have stricter restrictions criteria according to this Standard. Substances and preparations listed in regulation EC 552/2009 (amending regulation EC 1907/2006 (REACH), annex XVII), and the 'candidate list of substances of very high concern for authorisation' of the European Chemicals Agency (ECHA) are prohibited.
Microplastics	Prohibited are: Intentionally added synthetic microplastics.
In-can preservatives in chemical inputs	Prohibited are: In-can preservatives which do not meet the requirements of Sections 4.2.2 and 4.2.3 Except, allowed are: Biocidal active substance(s) that comply with European biocidal products regulation (BPR 528/2012) and listed on the Union list of BPR for product type PT06 (preservatives for products during storage): https://echa.europa.eu/en/information-on-chemicals/biocidal- active-substances
Quinoline	Prohibited

GOTS chemical input criteria RSL version 9.0	
4.2.3 Requirements related to hazards and toxicity	
Substance Group	**Criteria**
Inputs which are classified with specific hazard statements (risk phrases) related to health hazards	Prohibited are: - substances which are classified with any of the following hazard statements, if applied as direct input - preparations which are classified with any of the following hazard statements - preparations which contain at least one substance which is classified with any of the following hazard statements in accordance with the codification system of the Global Harmonized System (GHS) as published by the United Nations, annex 3: H300 Fatal if swallowed H310 Fatal in contact with skin H330 Fatal if inhaled H340 May cause genetic defects H341 Suspected of causing genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child H361 Suspected of damaging fertility or the unborn child H370 Causes damage to organs H371 May cause damage to organs H372 Causes damage to organs through prolonged or repeated exposure For inputs assessed on basis of GHS, where the implementation system does not provide for the codified H-statements, the corresponding hazard classes and categories of GHS, annex 3 apply. For inputs assessed according to the 'risk phrase' classification (Directive 67/548EEC amended and appealed by Regulation EC 1272/2008) the equivalent risk phrases apply.
Inputs which are classified with specific hazard statements / risk phrases related to environmental hazards	Prohibited are: - substances which are classified with any of the following hazard statements / risk phrases, if applied as direct input - preparations which are classified with any of the following hazard statements / risk phrases In accordance with the codification system of the Global Harmonized System (GHS) as published by the United Nations, annex 3: H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long lasting effects H411: Toxic to aquatic life with long lasting effects H420: Harms public health and the environment by destroying ozone in the upper atmosphere H433: Harmful to terrestrial vertebrates

GOTS chemical input criteria RSL version 9.0	
4.2.3 Requirements related to hazards and toxicity	
Substance Group	**Criteria**
Inputs which are bio- accumulative and not rapidly degradable	Prohibited are substances, if applied as direct input, and preparations classified with H413: 'May cause long-lasting effects to aquatic life' (respective R53) that are both, 'bio- accumulative'1*) and not rapidly degradable2*), 3*)
1*) All substances or preparations are considered as (potentially) bio-accumulative, if BCF (= bio-concentration factor) ≥ 500 or, if absent, log Kow (= logarithm of the n-octanol-water partition coefficient) ≥ 4 2*) Testing requirement: >70% OECD 301A [28d] or equivalent testing method according to footnote 4 of the table below, except test methods related to eliminability (OECD 302). In those cases where only BOD and COD data are available the input is considered 'rapidly degradable' when the ratio of BOD5/COD is ≥ 0,5. 3*) This criterion is not applicable to preparations whose very low solubility in water prevents their bioaccumulation (e.g. pigment preparations)	
All preparations applied shall further comply with the following requirements:	
Parameter	**Criteria**
Oral Toxicity 1*)	LD50 > 2000 mg/kg 2*)
Aquatic Toxicity 3*)	LC50, EC50, IC50 > 1 mg/l
Relation of biodegradability / eliminability 4*) to aquatic toxicity 3*)	Only allowed, if: < 70% and > 100 mg/l > 70% and > 10 mg/l > 95% and > 1 mg/l
1) Performing new animal tests to determine unknown LD50 values in the course of the GOTS assessment procedure for inputs (refer to Section 4.2) is prohibited. Instead, alternative methods (e.g. Acute Toxicity Estimates (ATE); conclusions on analogy from similar products; validated structure-activity relationships; calculation from available data of substances contained; expert judgment; in vitro tests) shall be used to determine unknown values. 2) Substances and preparations, such as alkalis and acids that fail to meet this requirement because of their pH value only, are exempt from this requirement. 3) Performing new fish and daphnia tests to determine unknown LC50 / EC50 values in the course of the GOTS assessment procedure for inputs is prohibited. Instead, alternative methods such as Acute Toxicity Estimates (ATE); validated structure-activity relationships; conclusion on analogy from similar products; calculation from available data of substances contained; fish egg test (embryo toxicity test (FET)); in vitro test; IC50 algae; OECD 201 [72hr] shall be used to determine unknown values. 4) Accepted test methods: OECD 301A, OECD 301E, ISO 7827, OECD 302A, ISO 9887, OECD 302B, ISO 9888 or OECD 303A; alternatively, to meet the 70% level a preparation tested with one of the methods OECD 303A or ISO 11733 a percentage degradation of at least 80% shall be shown - or if tested with one of the methods OECD 301B, ISO 9439, OECD 301C, OECD 302C, OECD 301D, ISO 10707, OECD 301F, ISO 9408, ISO 10708 or ISO 14593, a percentage degradation of at least 60% shall be shown. To meet the 95% level, if tested with any of the mentioned methods, a percentage degradation of 95% shall be shown. Testing duration with each method is 28 days.	

GOTS chemical input criteria RSL version 9.0	
4.2.6.5 Pre-treatment and Other Wet Processing Stages	
Parameter	**Criteria**
Ammonia treatment	Prohibited are Amonia Treatments Exception: Ammonia treatment is allowed if performed in a closed system with a minimum of 99% recycling rate
Bleaching	Allowed are · inputs that are oxygen-based only (peroxides, ozone, etc.) Exceptions: 1. Catalysers which contain manganese may be used provided that ETAD's manganese residue limit (1000 mg/kg, see Section 7) is met. 2. Approved Certifiers may grant exceptions for non-cotton fibre products where oxygen bleaches are not sufficiently functional, provided they meet the basic requirements as set in Section 4.2.2 and 4.2.3
Boiling, kiering, washing	Allowed: Only auxiliaries that meet the basic requirements set in Sections 4.2.2 and 4.2.3 Restricted: Washing detergents shall not include phosphates
Chlorination of wools	Prohibited
Optical brightening	Allowed: Optical brightening agents (OBAs) that meet all criteria for the selection of dyes, pigments, inks and auxiliaries as set in Section 4.2.6.6.
Other (not explicitly listed pre-treatment methods)	Allowed: Mechanical/thermal pre-treatment methods and such with the use of Substances based on Natural Materials

GOTS chemical input criteria RSL version 9.0	
4.2.6.6 Dyeing	
Parameter	**Criteria**
Selection of dyes, pigments and auxiliaries	Allowed are natural dyes, synthetic dyes, pigments and auxiliaries that meet the requirements as set in Sections 4.2.2 and 4.2.3 only. Prohibited are (disperse) dyes classified as sensitizing / allergenic. Prohibited are colourants classified as carcinogenic or suspected as carcinogenic (H350 / H351). Prohibited are dyes and pigments containing heavy metals as an integral part of the dye molecule (e.g. heavy metal dyes, certain reactive dyes) under consideration of the following exceptions: - General exception for Iron - Specific exception for copper: permitted up to 5% by weight in blue, green and turquoise dyestuffs and pigments. Prohibited are inputs containing >1% Permanent AOX. Exception: yellow, green and violet pigments up to 5% Permanent AOX is permitted. The use of natural dyes and auxiliaries that are derived from a threatened species listed on the Red List of the IUCN is prohibited. Sensitising (H317) chemicals such as disperse dyes shall not be used, handled or manufactured unless proper and sufficient Occupational Health and Safety practices are adhered to as in Section 4.4.7 at Certified Entities and Chemical Formulators (see 4.2.5).

GOTS chemical input criteria RSL version 9.0	
4.2.6.7 Printing	
Parameter	**Criteria**
Selection of dyes, pigments and auxiliaries	Allowed are natural and synthetic dyes, pigments, and auxiliaries that meet the requirements as set in Sections 4.2.2 and 4.2.3 only. Ammonia is allowed only as a required buffer in pigment printing paste. Flock printing is allowed with non-GMO natural and regenerated fibres that comply with Section 5.2.8. Prohibited are (disperse) dyes classified as sensitizing / allergenic. Prohibited are colourants classified as carcinogenic or suspected as carcinogenic (H350 / H351). Prohibited are dyes and pigments containing heavy metals as integral part of ⨯ PROHIBITED the dye molecule (e.g. heavy metal dyes, certain reactive dyes), under the consideration of following exceptions: - General exception for Iron - Specific exception for copper: permitted up to 5% by weight in blue, green and turquoise dyestuffs and pigments. Prohibited are printing methods using aromatic solvents, phthalates or chlorinated plastics (e.g. PVC). Prohibited are inputs containing >1% Permanent AOX. Exception: yellow, green and violet pigments up to 5% Permanent AOX is permitted. Prohibited is the use of natural dyes and auxiliaries that are derived from ⨯ PROHIBITED threatened species listed on the Red List of the IUCN. Sensitising(H317)chemicalssuchasdispersedyesshallnot !RESTRICTED be used, handled or manufactured unless proper and sufficient Occupational Health and Safety practices are adhered to as in Section 4.4.7 at Certified Entities and Chemical Formulators (see 4.2.5).

GOTS chemical input criteria RSL version 9.0	
4.2.6.8 Finishing and Manufacturing	
Parameter	**Criteria**
Selection of finishing methods and auxiliaries	Allowed are Mechanical, thermal and other physical finishing methods Allowed are Natural and synthetic Inputs that meet the basic requirements as set in Sections 4.2.2 and 4.2.3 only Allowed are Stain removers that meet the basic requirements as set in Sections 4.2.2 and 4.2.3. Prohibited are uses of synthetic Inputs for anti-microbial finishing (includingbiocides), coating, filling and stiffening, lustering and matting, as well as weighting. Prohibited are Garment finishing methods that are considered to be harmful to the Workers (such as sandblasting of denim).

GOTS Segregation, storage, packaging and transport version 9.0
2.6 Segregation, storage, packaging and transport
B2B trade of GOTS goods (pre retail)
Organic textile products shall be stored and transported in such a manner so as to prevent contamination by prohibited *substances* and commingling with conventional products or substitution of the contents.
Certified Entities shall establish a system of segregation to prevent organic fibres from being commingled or substituted with conventional fibres.
All organic raw materials and GOTS Goods shall be clearly labelled and identified as such along the entire supply chain/at every stage of the supply chain.
Transport means and shipping documents shall be documented.
In cases where pesticides/biocides are mandated for use due to national or regional rules or law, they may be used in Storerooms / Transport, but they shall comply with the applicable international or national organic production standard. Wooden pallets used in storage and transport activities are exempt from this requirement.
The use of plastic packaging materials should be minimised. Synthetic packaging material shall not contain chlorinated plastics (e.g. PVC).
Retail (B2C) trade of GOTS goods
Single use virgin plastic hangers are prohibited in retail packaging of *GOTS Goods*. Recycled plastic hangers may be used.
Final GOTS goods with complete GOTS labelling can be stored / transported together with conventional products of similar type with positive assurance that there can be no substitution of products.
Synthetic packaging material shall not contain chlorinated plastics (e.g. PVC). The use of plastic packaging materials should be minimized.
Bioplastic packaging produced from non-GMO biomass sources and certified/tested to be non-toxic, and biodegradable or home/industrially compostable can be used.
Paper or cardboard used in packaging material for the retail trade of *GOTS Goods* (incl. labelling items such as hang tags or swing tags) shall be recycled from *pre*- or *post*- *consumer waste* or certified according to a program that verifies compliance with sustainable forestry management principles.
Textile fiber materials used for packaging shall meet one of the following criteria:
a)are certified organic see Section 2.1 and residue limit values in Section 5.2.7 (GOTS manual 7.0) or b)are certified organic - in - conversion see Section 2.1 and residue limit value in Section 5.2.7 (GOTS manual 7.0) c)meet criteria for accepted additional fibers see Section 3.2 (without limitation on fibre percentages), and meet the residue limit values in Section 5.2.8 (GOTS manual 7.0)

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Change Log RSL 9.0 (version May 2025)	
CHEMICAL GROUP (RSL)	**CHANGE LOG MAJOR CHANGES FROM RSL 7.0 TO RSL 9.0**
ADSORBABLE HALOGENIC COMPOUNDS (AOX)	Added new category
ACETOPHENONE & 2-PHENYL-2-PROPANOL	Added new category Moved substances from OTHER RESTRICTED CHEMICALS category
ACIDIC AND ALKALINE SUBSTANCES	Added new category Moved substance from OTHER ATTENTION POINTS category Updated relevance of restriction
ALKYLPHENOLS (AP) AND ALKYLPHENOL ETHOXYLATES (APEO)	Updated test method for leather (NPEO/OPEO) Added 3 substances
AZO AMINES AND ARYLAMINE SALTS	Updated test method for leather
BIOCIDES	Removed category Moved DMFu to its own category
BISPHENOLS	Added new category Moved Bisphenol A from OTHER RESTRICTED CHEMICALS category Updated limit Added 3 substances
BROMINATED AND ORGANOPHOSPHOROUS SUBSTANCES	Changed category name from FLAME RETARDANTS Added 3 substances
CHLORINATED PARAFFINS	No changes
CHLOROPHENOLS	Updated test method Added 2 substances
CHLORINATED BENZENES AND TOLUENES	Updated test method Updated relevance of restriction
CYCLOSILOXANES	Added new category
DIMETHYLFUMARATE (DMFu)	Added new category Moved substance from BIOCIDES category
DISPERSE DYES WHICH ARE CLASSIFIED TO BE ALLERGENIC	Added 4 substances
DYES WHICH ARE CLASSIFIED TO BE CARCINOGENIC	Added 2 substances
DYES, NAVY BLUE	Changed category name from DYES WHICH ARE ADDITIONALLY RESTRICTED Updated relevance of restriction
FLAME RETARDANTS	Removed category (changed name to BROMINATED & ORGANOPHOSPHOROUS SUBSTANCES)

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Change Log RSL 9.0 (version May 2025)	
CHEMICAL GROUP (RSL)	**CHANGE LOG MAJOR CHANGES FROM RSL 7.0 TO RSL 9.0**
FLUORINATED GREENHOUSE GASES	No changes
FORMALDEHYDE	Updated test method Updated relevance of restriction
GLYOXAL	Added new category
HEAVY METALS EXTRACTABLE	Added 3 substances
HEAVY METALS EXTRACTABLE CHROMIUM VI	No changes
HEAVY METALS JEWELRY	No changes
HEAVY METALS RELEASABLE NICKEL	Updated test method
HEAVY METALS TOTAL CONTENT	No changes
MONOMERS	Updated test method for vinylchloride
N-NITROSAMINES	No changes
ORGANOTIN COMPOUNDS	Added 9 substances
ORTHO-PHENYLPHENOL (OPP)	Added new category Moved substance from OTHER RESTRICTED CHEMICALS category Updated test method
OTHER ATTENTION POINTS	Moved pH value to its own category ACIDIC AND ALKALINE SUBSTANCES Removed odour Removed category
OTHER RESTRICTED CHEMICALS	Added Aniline
OZONE DEPLETING SUBSTANCES	No changes
PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS)	Updated overview and test method based on latest information
PESTICIDES	Updated test method
PHTHALATES	Updated test method Updated relevance of restriction Added 1 substance
POLYCHLORINATED AND HALOGENATED BIPHENYLS (PCBs) AND NAPHTHALENES (PCN)	Added new category

Change Log RSL 9.0 (version May 2025)	
CHEMICAL GROUP (RSL)	**CHANGE LOG MAJOR CHANGES FROM RSL 7.0 TO RSL 9.0**
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)	Updated test method Added 6 substances
PVC AND LATEX	No changes
QUINOLINE	Added new category Moved substance from OTHER RESTRICTED CHEMICALS category
RESTRICTION ON PACKAGING	Updated limit for MOAH
SOLVENTS AND RESIDUALS	No changes
UV ABSORBERS/STABILISERS	Updated test method Added 1 substance
VOLATILE ORGANIC COMPOUNDS	Updated relevance of restriction Updated limit for all substances except Benzene Added 25 substances (and moved to appendix)
GENERAL	Added legislation information
GOTS	Added GOTS limits and requirements
MATERIALS MATRIX	Added
RISK MATRIX	Updated based on latest information
PACKAGING MATRIX	Added
APPENDICES	Updated based on latest information
REACH CANDIDATE LIST	Updated from 233 substances to 247 substances Added remark: Some substances included in the Candidate List may also appear in other sections of the RSL with different limits under REACH Annex XVII. In this case, the lowest (strictest) limit always applies.