

JOSH V

RESTRICTED SUBSTANCES LIST JOSH V

RSL VERSION 3.0

AUGUST 2025

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Introduction RSL version 3.0

INTRODUCTION

The production of apparel from raw materials to finished products is a complex and chemical-intensive process.

For this reason JOSH V is committed to developing and implementing responsible chemical management procedures throughout its supply chain and for all manufacturing processes and product components (including accessories / trims attached to garments, prints and packaging materials).

JOSH V expects the same commitment from its suppliers and has developed a Restricted Substances List (JOSH V RSL 3.0) as a reference for suppliers regarding all chemicals that are banned or restricted in JOSH V's production processes and finished products. The purpose of the Restricted Substances List (RSL) is to market products that are compliant to legislation, safe for the consumer, reduce the risks of workers at the production locations and the substitution of hazardous substances in the textile and apparel supply chain.

It is JOSH V's priority to ensure that all chemicals and other substances (dyes, finishes etc) used in the manufacture of its products are approved and quantities fall within the maximum allowable concentration limits stated in this RSL. Non-compliance with these requirements can have serious consequences not only for the final consumer but also for the environment and for workers involved in the manufacturing process.

The RSL includes:

1. All legal and upcoming textile-related requirements in the European Union.
2. Industry standards and best practices such as AFIRM (<https://afirm-group.com/>)
3. Responsibility of the supplier regarding Substances of Very High Concern (SVHC) mentioned on the REACH Candidate list.

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) is an OEKO-TEX® certification that 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 sometimes more cost effective than carrying out single tests.

Please be prepared that your contact person may request a signature for each order as a declaration that the specific order complies with our RSL requirements. It is also possible that one or more of your styles could be selected for pre-shipment testing at a certified laboratory.

As a matter of general principle, JOSH V 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 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 RSL can be used as a basis for the development of Quality Management Systems.

Should you have any questions, please do not hesitate to contact:

Yenneke de Moes, Sustainability & CSR Coordinator:

Yenneke@joshv.com

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Materials version 3.0 - Examples of materials within the scope of the Josh V RSL*

Natural Fibres <i>Including semi-synthetics</i>	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
<ul style="list-style-type: none"> • Cotton • Wool • Silk • Hemp • Cashmere • Linen • Viscose (Semi-synthetic) • Lyocell (Semi-synthetic) 	<ul style="list-style-type: none"> • Cotton-Polyester • Wool-Nylon • Ramie- Polyester 	<ul style="list-style-type: none"> • Polyester • Acrylic • Nylon • Polyamide 	Textiles with: <ul style="list-style-type: none"> • Polyurethane (PU) coating • Polyvinyl Chloride (PVC) coating • Other Polymeric coatings 	<ul style="list-style-type: none"> • Leather • Fur skin • Bonded/ recycled leather 	Printing techniques such as: <ul style="list-style-type: none"> • Heat transfers • Dye sublimation printing • Screen printing • Direct-to-garment printing • Discharge printing • Plastisol transfers Coatings such as: <ul style="list-style-type: none"> • Polyvinyl chloride (PVC) • Polyurethane (PU) • UV-cured 	<ul style="list-style-type: none"> • Horn • Bone • Cork • Wood • Paper • Straw • Stone • Shell (e.g. coconut or mother of pearl) • Jacron (a semi-synthetic paper product) 	<ul style="list-style-type: none"> • Glass • Synthetic stone • Porcelain • Ceramic • Crystal 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • Stainless steel • Brass • Copper • Gold • Silver • Aluminum 	<ul style="list-style-type: none"> • Feathers • Down 	<ul style="list-style-type: none"> • 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 Textile, Leather and Footwear RSL 3.0																				
●●● 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	EVA	PU Foams	All other PU & TPU	Rubber excludes latex and silicon	Polycarbonate	ABS	PVC	All Other foams, plastics & Polymer	COATING AND PRINTS	GLUE	
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 ●●● for dyed/colored materials (non-white) only	E ●● for Wool materials only						J ●●● for Cadmium and Lead only; Crystal is exempt for Lead						N ●●● if Rubber or black Polymeric materials, otherwise ●●							
B ●● only if Flame Retardant use or contamination is suspected or if TPP use suspected in PU, TPU, or other polymeric materials	F ●● if extractable Chrome above 1 mg/kg only						K ●●● for PVC materials only. Otherwise ●●						P ●●● for PU and PVC- based materials only							
C ●● for silicone polymers only	G Copper is exempt from restriction limits in Metal parts						L ●● for Styrene/Butadiene Rubbers (SBRs) only						Q ●●● for glues fixed in final product							
D ●●● for Wood, Paper, and Straw materials only	H ●● for plant-based fibers only; N/A for animal based fibers						M ●●● if PFAS use or contamination is suspected													

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Risk Matrix Textile, Leather and Footwear RSL 3.0																			
●●● 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	EVA	PU Foams	All other PU & TPU	POLYMERS						GLUE
													Rubber excludes latex and silicon	Polycarbonate	ABS	PVC	All Other foams, plastics & Polymer	COATING AND PRINTS	
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
QUINOLINE		●●	●●																
SOLVENTS/RESIDUALS DMFa				●●●							●●●	●●●						●●●/P	●●●/P
SOLVENTS/RESIDUALS DMAC AND NMP				●●●							●●	●●				●●	●●	●●	●●
SOLVENTS/RESIDUALS FORMAMIDE									●●									●●	
UV ABSORBERS/STABILISERS									●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
VOLATILE ORGANIC COMPOUNDS (VOCs)				●●					●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●●/Q
A ●●● for dyed/colored materials (non-white) only	E ●● for Wool materials only						J ●●● for Cadmium and Lead only; Crystal is exempt for Lead						N ●●● if Rubber or black Polymeric materials, otherwise ●●						
B ●● only if Flame Retardant use or contamination is suspected or if TPP use suspected in PU, TPU, or other polymeric materials	F ●● if extractable Chrome above 1 mg/kg only						K ●●● for PVC materials only. Otherwise ●●						P ●●● for PU and PVC- based materials only						
C ●● for silicone polymers only	G Copper is exempt from restriction limits in Metal parts						L ●● for Styrene/Butadiene Rubbers (SBRs) only						Q ●●● for glues fixed in final product						
D ●●● for Wood, Paper, and Straw materials only	H ●● for plant-based fibers only; N/A for animal based fibers						M ●●● if PFAS use or contamination is suspected												

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Packaging Products version 3.0 - Examples of packaging products within the scope of the JOSH V RSL¹

JOSH V defines packaging as:

All products made of any materials of any nature to be used for the containment, protection, handling, delivery, and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.

Hangtags	Stickers	Protective Coverings	Trimmings	Sales Packaging	Transport Packaging
<ul style="list-style-type: none"> •Cords •Foil stamps •Hot stamp prints •Paper hang tags •Plastic hang tags •Price tags •Spot UV hang tags •UPC tags 	<ul style="list-style-type: none"> •Antimicrobial stickers •Labels, adhesive •Price tags •Tape 	<ul style="list-style-type: none"> •Lamination, matte or gloss •Foam material •Suit bags •Plastic cases •Poly bags •Poly bags, zippered 	<ul style="list-style-type: none"> •Bead chain •Collar bands •Clips, metal •Clips, plastic •Eyelets/grommets •Magnets •Pins •Tissue paper •Zippers •J-hooks •Plastic fasteners 	<ul style="list-style-type: none"> •Boxes/cartons •Gift boxes •Retail carry bags •Hangers (when sold with a clothing item) •Spot UV boxes •Suit bags •Thermal receipt paper •Tissue paper •UV coated boxes •Varnished coated boxes •Water-based (aqueous) lacquer coated boxes 	<ul style="list-style-type: none"> •Antimicrobial stickers •Boxes/cartons •Corrugated shipping boxes/cartons •J board •Silica gel/desiccant sachets •Stuffing materials, expanded foam materials •Water-based (aqueous) lacquer-coated boxes

¹ NOTE: This list provides examples of products within each category but is not exhaustive

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Packaging materials version 3.0 - Examples of packaging materials within the scope of the JOSH V RSL¹

Natural Fibers Including semi-synthetics	Blended Fibers	Synthetic Fibers	Coatings, Dyes & Prints	Natural Materials	Polymers, Plastics, Foams, Natural Rubber & Synthetic Rubber	Metal	Glue	Natural Leather	Synthetic coated fabric
<ul style="list-style-type: none"> • Cotton • Wool • Silk • Linen • Viscose (Semi-synthetic) • Lyocell (Semi-synthetic) • Cellulose 	<ul style="list-style-type: none"> • Cotton- Polyester • Wool-Nylon • Ramie- Polyester 	<ul style="list-style-type: none"> • Polyester • Acrylic • Nylon • Polyamide 	<ul style="list-style-type: none"> • Foil stamping • Hot-stamp printing • Spot UV • Soft-touch coatings 	<ul style="list-style-type: none"> • Cork • Wood • Paper • Straw • Stone • Cardboard • Jacron (semi-synthetic paper product) 	<ul style="list-style-type: none"> • Acrylonitrile butadiene styrene (ABS) • Ethylene vinyl acetate (EVA) • Polystyrene (PS) • Polyethylene (PE) • Neoprene • Polypropylene (PP) • Polycarbonate (PC) • Polyamide (PA) • Polyurethane (PU) • Polyvinyl chloride (PVC) • Thermoplastic polyurethane (TPU) • Thermoplastic elastomer (TPE) • Styrene ethylene butylene styrene (SEBS) 	<ul style="list-style-type: none"> • Stainless steel • Brass • Copper • Aluminium 	<ul style="list-style-type: none"> • Hot melt adhesive • Powdered adhesive • Flock adhesive • Contact adhesive • Latex glue • Polyurethane glue • Neoprene cement • Epoxies • Silicone adhesive • UV-cured adhesive 	<ul style="list-style-type: none"> • Leather • Fur & Hides 	<ul style="list-style-type: none"> • Polyurethane (PU) • Polyvinyl Chloride (PVC)

¹ NOTE: This list provides examples of materials within each category but is not exhaustive

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Packaging Matrix RSL 3.0										
●●● 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 negligible 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	SYNTHETIC COATED FABRIC
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			●●●	●●●
BROMINATED & ORGANOPHOSPHOROUS SUBSTANCES						●●/F				
BUTYLHYDROXYTOLUENE (BHT)						●●/G				
DIMETHYLFUMARATE (DMFu)						●●/H			●●	
FORMALDEHYDE	●●	●●	●●	●●●	●●●	●●/J		●●●	●●	●●
HEAVY METALS, TOTAL CONTENT (Cd, CrVI, Pb, Hg)*				●●	●●●/K	●●/L	●●		●●	
MOSH/MOAH				●●●/Q	●●●/Q	●●●/Q				
ORGANOTIN COMPOUNDS				●●●		●●●		●●●	●●	●●●
PERFLUORINATED AND POLYFLUORINATED CHEMICALS (PFAS)	Prohibited									
PHTHALATES				●●●/M		●●●/N		●●●	●●/P	●●●
A ●●● for foams only; ●● for all other materials	F ●● for materials with recycled content or if TPP use suspected in PU, TPU, or other polymeric materials					L ●● for PVC only, no testing requirement for other materials				
B ●●● for dyed/colored materials (non-white) only	G ●● for poly bags only; no testing requirement for other materials					M ●●● for plastisol prints; ●● for all other materials				
C ●●● for PVC only; ●● for all other materials	H ●● for silica gel packets and foam packaging only; no testing requirement for other materials.					N ●● for polycarbonate and ABS, ●●● for all other polymers				
D ●●● for thermal receipt and recycled paper only; ●● for all other materials	J ●● for rubber only, no testing requirement for other materials					P ●● for patent or coated leather; no testing requirement for other materials				
E ●● for tapes, polycarbonate, and recycled plastic cases only; no testing requirement for other materials	K ●● for materials with recycled content only; no testing requirement for other materials					Q ●●● for recycled paper and/or printed packaging 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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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
ACETOPHENONE AND 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	Potential breakdown products in EVA foam when using certain cross-linking agents, including Dicumyl Peroxide.
2-Phenyl-2-Propanol	617-94-7				
ACIDIC AND ALKALINE SUBSTANCES					
pH value	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: 3.5-7.0	<p>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.</p> <p>pH values less than 7 indicate sources of acidic substances, and values greater than 7 indicate sources of alkaline substances.</p> <p>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.</p> <p>JOSH V recommends the limits cited to comply with all global regulations for all products.</p> <p>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</p>

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
ALKYLPHENOLS (AP) AND ALKYLPHENOL ETHOXYLATES (APEO)					
Nonylphenols (NP), mixed isomers	Various	EU: REACH Regulation 1907/2006 Annex XVII entry No. 46	Textiles and Leather: EN ISO 21084:2019	Total APs: < 10 mg/kg	<p>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.</p> <p>APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers.</p> <p>Biodegradation of APEOs into APs is the main source of APs in the environment.</p>
Octylphenols (OP), mixed isomers	Various	EU: REACH Regulation 1907/2006 SVHC Candidate List	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		
Nonylphenoethoxylates (NPEOs)	Various	EU: REACH Regulation 1907/2006 Annex XVII entry No. 46 + 46a	All materials except Leather: EN ISO 18254-1:2016 with determination of APEO using LC/MS or LC/MS/MS	Total APs + APEOs: < 100 mg/kg	<p>APEOs and formulations containing APEOs are prohibited from use throughout supply chain and manufacturing processes.</p> <p>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.</p>
Octylphenoethoxylates (OPEOs)	Various	The entry is applicable for textile articles which can reasonably be expected to be washed in water during their normal lifecycle in concentrations equal to or greater than 0.01% (100 mg/kg) by weight of that textile article or of each part of the textile article.	Leather: Sample prep and analysis using EN ISO 18218-1:2023 with quantification according to EN ISO 18254-1:2016		
					Recycled products: Contact JOSH V Sustainability & CSR Coordinator for information about potential exemptions from the limit on NPEOs in recycled textile products.

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	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	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	EU: REACH Regulation 1907/2006 Annex XVII entry No.72 + appendix 12			
2,6-Xylidine	87-62-7				
4-Chloro-o-toluidinium chloride	3165-93-3				
2-Naphthylammoniumacetate	553-00-4				
4-Methoxy-m-phenylene diammonium sulphate	39156-41-7				
2,4,5-Trimethylaniline hydrochloride	21436-97-5				

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
BISPHENOLS					
Bisphenol-A (BPA)	80-05-7	<p>EU: Regulation 10/2011 (as amended) on plastic materials and articles intended to come into contact with food.</p> <p>EU: REACH Regulation 1907/2006 SVHC Candidate List</p>	<p>Leather: EN ISO 11936:2023</p> <p>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</p>	<p>Textiles & Leather: < 10 mg/kg</p> <p>Items intended to come in contact with the mouth: < 1 mg/kg</p>	<p>BPA may be used in the production of epoxy resins, polycarbonate plastics, flame retardants, and PVC.</p> <p>BPS may be used as a substitute for BPA and can be found along with BPF in polyamide dye-fixing agents and sulfone- and phenolbased leather tanning agents.</p>
Bisphenol S (BPS)	80-09-1	EU: REACH Regulation 1907/2006 SVHC Candidate List			<p>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.</p> <p>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.</p>
Bisphenol B (BPB)	77-40-7				
Bisphenol F (BPF)	620-92-8				<p>JOSH V recommends testing relevant materials for bisphenols according to the Testing Matrix and to work with suppliers to minimize residual concentrations or replace them with better alternatives where possible.</p>

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Restricted Substances List 3.0						
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION	
BROMINATED & ORGANOPHOSPHOROUS SUBSTANCES - Formerly Flame Retardants						
Pentabromodiphenyl ether (PentaBDE)	32534-81-9 60348-60-9	EU: Regulation 2019/1021 on Persistent Organic Pollutants	All materials: ISO 17881-1: 2016 for brominated flame retardants	< 10 mg/kg each	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.	
Decabromodiphenyl Ether (DecaBDE)	1163-19-5					
Heptabromodiphenylethers (HeptaBDEs)	68928-80-3					
Tetrabromodiphenylethers (TetraBDEs)	40088-47-9					
Hexabromodiphenylethers (HexaBDEs)	36483-60-0					
All other Polybrominated diphenyl ethers (PBDEs)	Various					
Hexabromocyclododecane (HBCDD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8					
Decabromodiphenyl ethane (DBDPE)	84852-53-9	NORWAY: Ban on brominated flame retardants: Product Regulations. Section 2a				
Tetrabromobisphenol A (TBBP A)	79-94-7	EU: REACH Regulation 1907/2006 SVHC Candidate List				
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	EU: REACH Regulation 1907/2006 Annex XVII entry No.45				
Octabromodiphenylether (OctaBDE)	32536-52-0	EU: REACH Regulation 1907/2006 Annex XVII entry No.8				
Polybrominated biphenyls (PBB)	59536-65-1	EU: REACH Regulation 1907/2006 Annex XVII entry No.7				All materials: ISO 17881-2: 2016 for phosphorus flame retardants
Bis-(2,3-dibromopropyl)phosphate (BDBPP)	5412-25-9					
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8					
Tris-(2-chloroethyl)-phosphate (TCEP)	115-96-8					
Trixylylphosphate (TXP)	25155-23-1					
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				
Triphenyl phosphate (TPP)	115-86-6	EU: REACH Regulation 1907/2006 SVHC Candidate List	< 500 mg/kg	May be used as a flame retardant, an antioxidant for PU materials, or as an alternative plasticizer to orthophthalates. Now included on the REACH SVHC list.		

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
CHLORINATED BENZENES AND TOLUENES					
Hexachlorobenzene (HCB)	118-74-1	EU:Regulation 2019/1021 on Persistent Organic Pollutants	All materials: EN 17137:2024	< 1 mg/kg (total)	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.
Pentachlorobenzenes (PCB)	608-93-5				
Trichlorobenzenes: 1,2,3-TriCB 1,2,4-TriCB 1,3,5-TriCB	Various 87-61-6 120-82-1 108-70-3	SWITZERLAND: ORRChem annex 1.2 (Art.3)			
α,α,α,4-tetrachlorotoluene; p-chlorobenzotrichloride	5216-25-1	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12			
α,α,α-trichlorotoluene; benzotrichloride	98-07-7				
α-chlorotoluene; benzyl chloride	100-44-7				
1,2,3,4-Tetrachlorobenzene	634-66-2				
1,2,3,5-Tetrachlorobenzene	634-90-2				
1,2,4,5-Tetrachlorobenzene	95-94-3				
2-Chlorotoluene	95-49-8				
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				
1,3-Dichlorobenzene	541-73-1				
1,4-Dichlorobenzene	106-46-7				
1,2-Dichlorobenzene	95-50-1		< 10 mg/kg		

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
CHLORINATED PARAFFINS					
Short-chain Chlorinated Paraffins (SCCPs) (C10-C13)	85535-84-8	EU: Regulation 2019/1021 on Persistent 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	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 Persistent Organic Pollutants	All materials: EN 17134-2:2023	< 0.5 mg/kg each	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)			
2,3,4,6- Tetrachlorophenol (TeCP)	58-90-2				
2,3,4,5- Tetrachlorophenol (TeCP)	4901-51-3				
2,3,4-Trichlorophenol (TriCP)	15950-66-0				
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				

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SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
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	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				
Dodecamethylcyclohexasiloxane (D6)	540-97-6				
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	DMFu is an anti-mold agent that may be used in sachets in packaging to prevent the buildup of mold, especially during shipping.

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	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	<p>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.</p> <p>Disperse dyes are used in synthetic fiber (e.g., polyester, acetate, polyamide).</p> <p>Restricted disperse dyes are suspected of causing allergic reactions and are prohibited from use for dyeing of textiles.</p>
C.I. Disperse Blue 35A	56524-77-7	GERMANY: The authoritative German Federal Institute for Risk Assessment (BfR) strongly advises not 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				
C.I. Disperse Blue 7	3179-90-6				
C.I. Disperse Blue 26	3860-63-7				
C.I. Disperse Blue 102	12222-97-8				
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 6858-49-7				
C.I. Disperse Yellow 56	54077-16-6				

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Restricted Substances List 3.0							
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION		
DYES WHICH ARE CLASSIFIED TO BE CARCINOGENIC							
C.I. Basic Red 9	569-61-9	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12	All materials: DIN 54231: 2022	< 30 mg/kg each	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						
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						
C.I. Direct Blue 6	2602-46-2						
C.I. Direct Brown 95	16071-86-6						
C.I. Direct Red 28*	573-58-0						
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. Acid Red 26	3761-53-3	* EU: REACH Regulation 1907/2006 SVHC Candidate List					
C.I. Acid Violet 49	1694-09-3						
DYES, NAVY BLUE							
Navy Blue Component 1: C39H23ClCrN7O12S.2Na Component 2: C46H30CrN10O20S2.3Na	118685-33-9	EU: REACH Regulation 1907/2006 Annex XVII entry no.43 + appendix 9			All materials: DIN 54231: 2022	< 30 mg/kg	Navy blue colorants are regulated and prohibited from use for dyeing of textiles. Index 611-070-00-2

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
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	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.	< 75 mg/kg	Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins.
HEAVY METALS EXTRACTABLE					
Lead (Pb)	7439-92-1	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12	All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019	< 1 mg/kg	May be associated with alloys, plastics, paints, inks, pigments and surface coatings.
Arsenic (As)	7440-38-2			< 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.
Cadmium (Cd)	7440-43-9			< 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.

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
HEAVY METALS EXTRACTABLE CONTINUED					
Antimony (Sb)	7440-36-0		All materials except leather: DIN EN 16711-2:2016 Leather: DIN EN ISO 17072-1:2019 *Copper is exempt from restriction limits in Metal parts.	< 30 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	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.
Chromium (Cr)	7440-47-3			< 2.0 mg/kg Leather: < 200 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			< 4 mg/kg	Cobalt and its compounds can be used in alloys, pigments, dyestuff, and the production of plastic buttons.
Copper (Cu)*	7440-50-8			< 50 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	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.
Nickel (Ni)	7440-02--0			< 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	May be found in synthetic fibres, paints, inks, plastics and metal trims.

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
HEAVY METALS EXTRACTABLE CONTINUED					
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	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	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
HEAVY METALS TOTAL CONTENT					
Lead and its compounds*	7439-92-1	EU: REACH Regulation 1907/2006 ANNEX XVII entry No.63 *Crystal or “lead glass” is exempt from total Lead restrictions (< 1000 mg/kg)	Non-metal: CPSC-CH-E1002-08.3 Metal: CPSC-CH-E1001-08.3 Lead in paint and surface coatings: CPSC-CH-E1003-09.1	< 90 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.
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	< 40 mg/kg	
Mercury (Hg)	7439-97-6	EU:REACH Regulation 1907/2006 ANNEX XVII entry No.62	Leather: DIN EN ISO 17072-2:2019	< 0.5 mg/kg	
Arsenic (As)	7440-38-2			< 100 mg/kg	

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SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	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 for non coated items Abrasion of coated items: EN 12472:2020	Release (metal parts): Prolonged skin contact: 0.5 µg/cm ² /week Pierced part: 0.2 µg/cm ² /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.
MONOMERS					
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, but total styrene is not.
Vinyl Chloride	75-01-4		EN ISO 6401:2022	< 1 mg/kg	Vinyl Chloride is a precursor for polymerization and may be present in various PVC materials like prints, coatings, flip flops, and synthetic leather.
N-NITROSAMINES					
N-Nitrosodibutylamine (NDBA)	924-16-3				
N-Nitrosodiethylamine (NDEA)	55-18-5				
N-Nitrosodimethylamine (NDMA)	62-75-9				
N-Nitrosodipropylamine (NDPA)	621-64-7				
N-Nitrosomorpholine (NMOR)	59-89-2				
N-Nitroso-N-ethyl-N-phenylamine (NEPhA)	612-64-6				
N-Nitroso-N-methyl-N-phenylamine (NMPhA)	614-00-6				
N-Nitroso-piperidine (NPIP)	100-75-4				
N-Nitroso-pyrrolidine (NPYR)	930-55-2		EN ISO19577:2019 with LC/MS/MS verification if positive	< 0.5 mg/kg each	Can be formed as by-product in the production of rubber.

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SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	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 each	<p>Class of chemicals combining tin and organics such as butyl and phenyl groups.</p> <p>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.</p> <p>In textiles and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.</p>
Triphenyltin (TPhT)	Various				
Dibutyltin (DBT)	Various				
Diocetyl tin (DOT)	Various				
Monobutyltin (MBT)	Various				
Tricyclohexyltin (TCyHT)	Various				
Triocetyl tin (TOT)	Various				
Tripropyltin (TPT)	Various				
Trimethyltin (TMT)	Various				
Monooctyltin (MOT)	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				

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
ORTHO-PHENYLPHENOL (OPP)					
Ortho-phenylphenol (OPP)	90-43-7		All materials: EN 17134-2:2023	< 1000 mg/kg	OPP is used for its preservative properties in leather or as a carrier in polyester dyeing processes.
OZONE DEPLETING SUBSTANCES					
See Regulation (EU) 2024/590 for a complete list	Various	Regulation (EU) 2024/590	All materials: GC/MS headspace 120° C for 45 minutes	< 5 mg/kg	Prohibited from use. Ozone-depleting substances have been used as a foaming agent in PU foams as well as a dry-cleaning agent.

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SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	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	USA	EN 14582:2016 or ASTM D7359:2023	< 100 mg/kg	<p>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.</p> <p>PFAS may be used in commercial water-, oil-, and stain-repellent agents as well as in breathable membranes that remove moisture, e.g., PTFE.</p> <p>* Refer to Appendix A for the full list of substances and CAS Numbers included in this restriction.</p> <p>Recycled products: Contact JOSH V about potential exemptions from the limit on total organic fluorine in recycled textile products.</p> <p>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.</p> <p>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.</p>
Perfluorooctane Sulfonate (PFOS) and its salts	Various	EU: Regulation 2019/1021 on Persistent Organic Pollutants	All materials except leather: EN 17681-1:2025 & EN 17681-2:2022	< 0.025 mg/kg total	
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	Leather: EN ISO 23702-1:2023	< 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 Going into force 10 October 2026		< 0.025 mg/kg total	
PFHxA-related substances	Various			< 1 mg/kg total	

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
PESTICIDES (SEE APPENDIX B FOR INDIVIDUAL SUBSTANCES)					
See Appendix B for the complete list page 35	Various	All materials: EN ISO 15913:2003 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	All materials: EN ISO 15913:2003 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	< 0.5 mg/kg each	May be found in natural fibers, primarily cotton.

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	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 14389:2022 (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 Total: < 1000 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: <ul style="list-style-type: none"> • Flexible plastic components (e.g., PVC) <ul style="list-style-type: none"> • Print pastes • Adhesives • Plastic buttons • Plastic sleeveings • Polymeric coatings Listed here are all legally restricted phthalates as well as those included on the REACH substances of very high concern (SVHC) candidate list at the time of publication. Suppliers should assume that the RSL includes all phthalates on the SVHC list—whether itemized here or not— since the list 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	EU: REACH Regulation 1907/2006 Annex XVII entry No.52 a,b,c			
Di-“isononyl” phthalate (DINP)	28553-12-0				
Di-“isodecyl phthalate (DIDP)	26761-40-0				
Di-n-octyl phthalate (DNOP)	117-84-0	EU: Regulation 1907/2006 Candidate List			
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	EU: REACH Regulation 1907/2006 Annex XVII entry 72 + appendix 12			
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6				
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, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4		EU: Regulation 1907/2006 Candidate List		
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-cyclohexylphthalate (DCHP)	84-61-7				
Di-iso-hexylphthalate (DIHxP)	71850-09-4	DENMARK: Statutory Order 947 of 20/06/2020			
Bis(2-ethylhexyl) tetrabromophthalate	26040-51-7				
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				
Bis(2-propylheptyl) phthalate (DPHP)	53306-54-0			For informational purposes only. JOSH V recommends testing to assess content levels.	

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)					
Benzo(a)pyrene [BaP]	50-32-8	EUROPE: Regulation 1907/2006 REACH ANNEX XVII No.50	All materials: AFPS GS 2019 or EN 17132:2019 or ISO 16190:2021	< 1mg/kg each	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(a,h)anthracene	53-70-3				
Benzo(e)pyrene	192-97-2				
Benzo(j)fluoranthene	205-82-3				
Acenaphthene	83-32-9	EU: Regulation 1907/2006 Candidate List		No individual restriction The sum of 18 PAHs < 10 mg/kg	
Acenaphthylene	208-96-8				
Antracene	120-12-7				
Benzo(g,h,i)perylene	191-24-2				
Fluoranthene	206-44-0				
Fluorene	86-73-7				
Indeno(1,2,3-cd)pyrene	193-39-5				
Naphthalene*	91-20-3				
Phenanthrene	85-01-8				
Pyrene	129-00-0				
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	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.

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
SOLVENTS AND RESIDUALS					
DMFa (N,N Dimethylformamide)	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	DMFa is a solvent used in plastics, rubber, and polyurethane (PU) coating. Water-based PU does not contain DMFa and is therefore preferable.
1-Methyl-2-pyrrolidone	872-50-4			< 1000 mg/kg each	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.
DMAC (N,N-dimethylacetamide)	127-19-5			Solvent used in the production of elastane fibers and sometimes as substitute for DMFa.	
Formamide	75-12-7			EU: Regulation 1907/2006 Candidate List	Byproduct in the production of EVA foams.
UV ABSORBERS / STABILIZERS					
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	25973-55-1	EU: Regulation 2019/1021 on Persistent Organic Pollutants EU: Regulation 1907/2006 Candidate List	ISO 24040:2022 with extraction in THF, analysis by GC/MS	< 100 mg/kg	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.
2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)	3846-71-7	EU: Regulation 1907/2006 Candidate List		< 1000 mg/kg each	
2,4-di-tert-butyl-6-(5- chlorobenzotriazol-2-yl)phenol (UV- 327)	3864-99-1				
Bumetrizole (UV-326)	3896-11-5				
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3				
Drometrizole	2440-22-4		For informational purposes only. Josh V recommends testing to assess content levels.	Used as UV Absorbers for Plastics (PVC, PET, PC, PA, ABS, and other Polymers), Rubber, and Polyurethane.	

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
VOLATILE ORGANIC COMPOUNDS (VOCs)					
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 mg/kg	<p>The VOCs listed here represent a broad range of potentially harmful substances that can be semiquantified using the prescribed headspace method.</p> <p>These VOCs 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.</p> <p>They should not be used for any kind of facility cleaning or spot cleaning.</p> <p>Individual VOCs should be reported if found > 100 mg/kg (regardless of the limit stated) and confirmation testing may be required.</p>
<p>Volatile Organic Compounds (other) See Appendix C page 36 for a complete list</p>	Various			< 500 mg/kg	

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Restricted Substances List 3.0					
SUBSTANCE	CAS NUMBER	REGULATION	TEST METHOD	JOSH V RESTRICTED LIMIT	RELEVANCE OF RESTRICTION
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	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	Various	FRANCE: AGEC law, Article 112 of April 13, 2022 (reduction of certain critical compounds in printing inks for packaging materials)	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.

See packaging matrix on page 9

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Appendix version 3.0					
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-NH ₄)	29081-56-9	Silver perfluorooctanoate (PFOA-Ag)	335-93-3	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)	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(C ₂ H ₅) ₄)	56773-42-3	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1		
Didecyldimethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) 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	*NOTE: This list is a subset of PFAS and is not exhaustive.	
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 (H ₂ PFDA)	27854-31-5		

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Appendix version 3.0					
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	
Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	376-06-7	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5	Perfluorohexanoic Acid (PFHxA, C6-PFCA)	307-24-4
Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	PFHxA Related Substances	
Perfluorononanoic Acid (PFNA, C9-PFCA)	375-95-1	1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2
Perfluorodecanoic Acid (PFDA, C10-PFCA)	335-76-2	2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)	34598-33-9	1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	647-42-7
Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	2058-94-8	Perfluorocycloethanol 8:2 (8:2 FTOH)	678-39-7	1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)	17527-29-6
Perfluorododecanoic Acid (PFDoA, C12-PFCA)	307-55-1	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
Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)	72629-94-8	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		

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Appendix version 3.0					
SUBSTANCE	CAS NUMBER	SUBSTANCE	CAS NUMBER	SUBSTANCE	CAS NUMBER
APPENDIX B. PESTICIDES AND HERBICIDES, 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	Heptachlorepoxyde	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	Tolyfluanide	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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Appendix version 3.0					
SUBSTANCE	CAS NUMBER	SUBSTANCE	CAS NUMBER	SUBSTANCE	CAS NUMBER
APPENDIX C. VOLATILE ORGANIC COMPOUNDS					
VOCs with a limit of < 500 mg/kg					
Carbon Disulfide	75-15-0	1,2,3-trichloropropane	96-18-4	Merhylene chloride (dichloromethane)	75-09-2
Carbon Tetrachloride	56-23-5	1,2-Dichloropropane	78-87-5	n-hexane	110-54-3
Chloroform	67-66-3	2-Ethoxyethyl acetate	111-15-9	TEGDME (Triethylene glycol dimethyl ether)	112-49-2
Cyclohexanone	108-94-1	2-Ethylhexane acid	149-57-5		
1,2-Dichloroethane	107-06-2	Aniline	62-53-3		
1,1-Dichloroethylene	75-35-4	Bis(2-methoxyethyl)ether	111-96-6		
Ethylbenzene	100-41-4	Isophorone	78-59-1		
Pentachloroethane	76-01-7	Phenol	108-95-2		
1,1,1,2- Tetrachloroethane	630-20-6	THF	109-99-9		
1,1,2,2- Tetrachloroethane	79-34-5	1-bromopropane	106-94-5		
Tetrachloroethylene (PERC)	127-18-4	1-PG2MEA 1-Propanol,2-methoxy-, acetate)	70657-70-4		
Toluene	108-88-3	2-(2-Methoxyethoxy)ethanol	111-77-3		
1,1,1- Trichloroethane	71-55-6	2,4-toluene diisocyanate	584-84-9		
1,1,2- Trichloroethane	79-00-5	2-ethoxyethanol	110-80-5		
Trichloroethylene	79-01-6	2-Methoxyethanol EGME (ethylene glycol monomethyl ether)	109-86-4		
Xylene	1330-20-7	2-Methoxypropan-1-ol	1589-47-5		
Metaxylene	108-38-3	EGDME (Ethylene glycol dimethyl ether	110-71-4		
Orthoxylene	95-47-6	EGMEA (Ethylene glycol monomethyl ether acetate)	110-49-6		
Paraxylene	106-42-3	Hexachloroethane	67-72-1		

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REACH ANNEX: ECHA'S CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN **LAST UPDATE 25-06-2025** NUMBER OF SUBSTANCES ON THE CANDIDATE LIST: 250

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 year² and register the products in the SCIP database.
- Notify JOSH V immediately and provide sufficient information to allow safe use of the article to JOSH V 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.

The candidate list is updated twice per year by ECHA. The candidate list provided within this RSL reflects the situation at the time of creation of the RSL. Suppliers, importers and producers should always follow the latest version which can be found via the link above.

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 3.0				
No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
1	tetra(sodium/potassium) 7-[(E)-{2-acetamido-4-[(E)-(4-{[4-chloro-6-{{2-[(4-fluoro-6-{{4-(vinylsulfonyl)phenyl}amino)-1,3,5-triazine-2-yl}amino)propyl}amino)-1,3,5-triazine-2-yl}amino]-5-sulfonato-1-naphthyl}diazenyl]-5-methoxyphenyl}diazenyl]-1,3,6-naphthalenetrisulfonate (Reactive Brown 51)	-	25-06-2025	Toxic for reproduction (Article 57c)
2	decamethyltetrasiloxane	141-62-8	25-06-2025	vPvB (Article 57e)
3	1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane	17928-28-8	25-06-2025	vPvB (Article 57e)
4	reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	192268-65-8	21-01-2025	PBT (Article 57d)
5	Perfluamine	338-83-0	21-01-2025	vPvB (Article 57e)
6	Octamethyltrisiloxane	107-51-7	21-01-2025	vPvB (Article 57e)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
7	O,O,O-triphenyl phosphorothioate	597-82-0	21-01-2025	PBT (Article 57d)
8	6-[(C10-C13)-alkyl-(branched, unsaturated)-2,5-dioxopyrrolidin-1-yl]hexanoic acid	2156592-54-8	21-01-2025	Toxic for reproduction (Article 57c)
9	Triphenyl phosphate	115-86-6	07-11-2024	Endocrine disrupting properties (Article 57(f) - environment)
10	Bis(α,α -dimethylbenzyl) peroxide	80-43-3	27-06-2024	Toxic for reproduction (Article 57 c)
11	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	-	2024/01/23	vPvB (Article 57e)
12	Bumetrizole (UV-326)	3896-11-5	2024/01/23	vPvB (Article 57e)
13	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 57c)
14	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	3147-75-9	2024/01/23	vPvB (Article 57e)
15	2,4,6-tri-tert-butylphenol	732-26-3	2024/01/23	Toxic for reproduction (Article 57c) PBT (Article 57d)
16	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	14-06-2023	Toxic for reproduction (Article 57c)
17	Bis(4-chlorophenyl) sulphone	80-07-9	14-06-2023	vPvB (Article 57e)
18	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	-	17-01-2023	vPvB (Article 57e)
19	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	17-01-2023	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)
20	Melamine	108-78-1	17-01-2023	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)
21	Isobutyl 4-hydroxybenzoate	4247-02-3	17-01-2023	Endocrine disrupting properties (Article 57(f) - human health)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
22	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	17-01-2023	vPvB (Article 57e)
23	Barium diboron tetraoxide	13701-59-2	17-01-2023	Toxic for reproduction (Article 57c)
24	4,4'-sulphonyldiphenol	80-09-1	17-01-2023	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)
25	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	17-01-2023	Carcinogenic (Article 57a)
26	1,1'-[ethane-1,2-diylbisoxo]bis[2,4,6-tribromobenzene]	37853-59-1	17-01-2023	vPvB (Article 57e)
27	N-(hydroxymethyl)acrylamide	924-42-5	2022/06/10	Carcinogenic (Article 57a) Mutagenic (Article 57b)
28	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	2022/01/17	Toxic for reproduction (Article 57c)
29	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)
30	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	2022/01/17	Toxic for reproduction (Article 57c)
31	(±)-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)
32	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)
33	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)
34	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)
35	Glutaral	111-30-8	2021/07/08	Respiratory sensitising properties (Article 57(f) - human health)
36	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)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
37	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)
38	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)
39	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)
40	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)
41	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	2021/01/19	Toxic for reproduction (Article 57c)
42	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	2020/06/25	Toxic for reproduction (Article 57c)
43	butyl 4-hydroxybenzoate	94-26-8	2020/06/25	Endocrine disrupting properties (Article 57(f) - human health)
44	2-methylimidazole	693-98-1	2020/06/25	Toxic for reproduction (Article 57c)
45	1-vinylimidazole	1072-63-5	2020/06/25	Toxic for reproduction (Article 57c)
46	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)
47	Diisohexyl phthalate	71850-09-4	2020/01/16	Toxic for reproduction (Article 57c)
48	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	2020/01/16	Toxic for reproduction (Article 57c)
49	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	2020/01/16	Toxic for reproduction (Article 57c)
50	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)
51	2-methoxyethyl acetate	110-49-6	2019/07/16	Toxic for reproduction (Article 57c)
52	4-tert-butylphenol	98-54-4	2019/07/16	Endocrine disrupting properties (Article 57(f) - environment)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
53	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)
54	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)
55	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	2019/01/15	Toxic for reproduction (Article 57c)
56	Benzo[k]fluoranthene	207-08-9	2019/01/15	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
57	Fluoranthene	206-44-0 93951-69-0	2019/01/15	PBT (Article 57d) vPvB (Article 57e)
58	Phenanthrene	85-01-8	2019/01/15	vPvB (Article 57e)
59	Pyrene	129-00-0 1718-52-1	2019/01/15	PBT (Article 57d) vPvB (Article 57e)
60	Benzene-1,2,4-tricarboxylic acid 1,2-anhydride	552-30-7	2018/06/27	Respiratory sensitising properties (Article 57(f) - human health)
61	Benzo[ghi]perylene	191-24-2	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
62	Decamethylcyclopentasiloxane	541-02-6	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
63	Dicyclohexyl phthalate (DCHP)	84-61-7	2018/06/27	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - human health)
64	Disodium octaborate	12008-41-2	2018/06/27	Toxic for reproduction (Article 57c)
65	Dodecamethylcyclohexasiloxane	540-97-6	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
66	Ethylenediamine	107-15-3	2018/06/27	Respiratory sensitising properties (Article 57(f) - human health)
67	Lead	7439-92-1	2018/06/27	Toxic for reproduction (Article 57c)
68	Octamethylcyclotetrasiloxane	556-67-2	2018/06/27	PBT (Article 57d) vPvB (Article 57e)
69	Terphenyl, hydrogenated	61788-32-7	2018/06/27	vPvB (Article 57e)
70	Benz[a]anthracene	56-55-3 1718-53-2	2018/01/15	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
71	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)
72	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)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
73	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)
74	Chrysene	218-01-9 1719-03-5	2018/01/15	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
75	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination there of]	-	2018/01/15	vPvB (Article 57e)
76	fluoranthene	-	2018/01/15	Endocrine disrupting properties (Article 57(f) - environment)
77	Perfluorohexane-1-sulphonic acid and its salts	-	2017/07/07	vPvB (Article 57e)
78	4,4'-isopropylidenediphenol Bisphenol A; BPA	80-05-7	2017/01/12	Toxic for reproduction (Article 57 c)
79	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)
80	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)
81	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)
82	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)
83	1,3-propanesultone	1120-71-4	2015/12/17	Carcinogenic (Article 57a);
84	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	2015/12/17	vPvB (Article 57e)
85	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	2015/12/17	vPvB (Article 57e)
86	Nitrobenzene	98-95-3	2015/12/17	Toxic for reproduction (Article 57 c)
87	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)
88	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)
89	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)

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REACH Candidate List RSL 3.0				
No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
90	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)
91	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)
92	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)
93	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)
94	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)
95	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)
96	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)
97	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)
98	Sodium peroxometaborate	04-04-7632	2014/06/16	Toxic for reproduction (Article 57 c)
99	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	2014/06/16	Toxic for reproduction (Article 57 c)
100	Sodium perborate; perboric acid, sodium salt	-	2014/06/16	Toxic for reproduction (Article 57 c)
101	Trixylyl phosphate	25155-23-1	2013/12/16	Toxic for reproduction (Article 57 c);
102	Lead di(acetate)	301-04-2	2013/12/16	Toxic for reproduction (Article 57 c);
103	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	2013/12/16	Toxic for reproduction (Article 57 c);
104	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);
105	Cadmium sulphide	1306-23-6	2013/12/16	Carcinogenic (Article 57a);
106	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);
107	Dihexyl phthalate	84-75-3	2013/12/16	Toxic for reproduction (Article 57 c);
108	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	2013/06/20	Toxic for reproduction (Article 57 c);
109	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)
110	Pentadecafluorooctanoic acid (PFOA)	335-67-1	2013/06/20	Toxic for reproduction (Article 57 c);
111	Dipentyl phthalate (DPP)	131-18-0	2013/06/20	Toxic for reproduction (Article 57 c);

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
112	Cadmium	7440-43-9	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
113	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)
114	4,4'-methylenedi-o-toluidine	838-88-0	2012/12/19	Carcinogenic (Article 57a)
115	N-pentyl-isopentylphthalate	776297-69-9	2012/12/19	Toxic for reproduction (Article 57 c)
116	4-Aminoazobenzene	60-09-3	2012/12/19	Carcinogenic (Article 57a)
117	Orange lead (lead tetroxide)	1314-41-6	2012/12/19	Toxic for reproduction (Article 57 c)
118	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	2012/12/19	Toxic for reproduction (Article 57 c)
119	Dimethyl sulphate	77-78-1	2012/12/19	Carcinogenic (Article 57a)
120	Heptacosafuorotetradecanoic acid	376-06-7	2012/12/19	vPvB (Article 57 e)
121	Lead titanium zirconium oxide	12626-81-2	2012/12/19	Toxic for reproduction (Article 57 c)
122	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)
123	6-methoxy-m-toluidine (p-cresidine)	120-71-8	2012/12/19	Carcinogenic (Article 57a)
124	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	2012/12/19	Toxic for reproduction (Article 57 c)
125	1,2-Diethoxyethane	629-14-1	2012/12/19	Toxic for reproduction (Article 57 c)
126	Sulfurous acid, lead salt, dibasic	62229-08-7	2012/12/19	Toxic for reproduction (Article 57 c)
127	1-bromopropane (n-propyl bromide)	106-94-5	2012/12/19	Toxic for reproduction (Article 57 c)
128	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	2012/12/19	PBT (Article 57 d); vPvB (Article 57 e)
129	Biphenyl-4-ylamine	92-67-1	2012/12/19	Carcinogenic (Article 57a)
130	Pentalead tetraoxide sulphate	12065-90-6	2012/12/19	Toxic for reproduction (Article 57 c)
131	Silicic acid, lead salt	11120-22-2	2012/12/19	Toxic for reproduction (Article 57 c)
132	o-Toluidine	95-53-4	2012/12/19	Carcinogenic (Article 57a)
133	Acetic acid, lead salt, basic	51404-69-4	2012/12/19	Toxic for reproduction (Article 57 c)
134	Dioxobis(stearato)trilead	12578-12-0	2012/12/19	Toxic for reproduction (Article 57 c)
135	Lead bis(tetrafluoroborate)	13814-96-5	2012/12/19	Toxic for reproduction (Article 57 c)
136	Lead dinitrate	10099-74-8	2012/12/19	Toxic for reproduction (Article 57 c)
137	Silicic acid (H ₂ Si ₂ O 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)
138	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)
139	N-methylacetamide	79-16-3	2012/12/19	Toxic for reproduction (Article 57 c)

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REACH Candidate List RSL 3.0				
No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
140	Pyrochlore, antimony lead yellow	8012-00-8	2012/12/19	Toxic for reproduction (Article 57 c)
141	Lead monoxide (lead oxide)	1317-36-8	2012/12/19	Toxic for reproduction (Article 57 c)
142	Tetralead trioxide sulphate	12202-17-4	2012/12/19	Toxic for reproduction (Article 57 c)
143	Trilead bis(carbonate)dihydroxide	1319-46-6	2012/12/19	Toxic for reproduction (Article 57 c)
144	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)
145	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	2012/12/19	Toxic for reproduction (Article 57 c)
146	N,N-dimethylformamide	68-12-2	2012/12/19	Toxic for reproduction (Article 57 c)
147	Tetraethyllead	78-00-2	2012/12/19	Toxic for reproduction (Article 57 c)
148	Methyloxirane (Propylene oxide)	75-56-9	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
149	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)
150	Fatty acids, C16-18, lead salts	91031-62-8	2012/12/19	Toxic for reproduction (Article 57 c)
151	Trilead dioxide phosphonate	12141-20-7	2012/12/19	Toxic for reproduction (Article 57 c)
152	o-aminoazotoluene	97-56-3	2012/12/19	Carcinogenic (Article 57a)
153	[Phthalato(2-)]dioxotrilead	69011-06-9	2012/12/19	Toxic for reproduction (Article 57 c)
154	Tricosafuorododecanoic acid	307-55-1	2012/12/19	vPvB (Article 57 e)
155	Lead oxide sulfate	12036-76-9	2012/12/19	Toxic for reproduction (Article 57 c)
156	Methoxyacetic acid	625-45-6	2012/12/19	Toxic for reproduction (Article 57 c)
157	Diisopentylphthalate	605-50-5	2012/12/19	Toxic for reproduction (Article 57 c)
158	Lead cyanamidate	20837-86-9	2012/12/19	Toxic for reproduction (Article 57 c)
159	4,4'-oxydianiline and its salts	101-80-4	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
160	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	2012/12/19	Carcinogenic (Article 57a)
161	Henicosafuoroundecanoic acid	2058-94-8	2012/12/19	vPvB (Article 57 e)
162	Furan	110-00-9	2012/12/19	Carcinogenic (Article 57a)
163	Pentacosafuorotridecanoic acid	72629-94-8	2012/12/19	vPvB (Article 57 e)
164	Diethyl sulphate	64-67-5	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
165	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)
166	Dibutyltin dichloride (DBTC)	683-18-1	2012/12/19	Toxic for reproduction (Article 57 c)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
167	Lead titanium trioxide	12060-00-3	2012/12/19	Toxic for reproduction (Article 57 c)
168	Formamide	75-12-7	2012/06/18	Toxic for reproduction (Article 57 c)
169	[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)
170	Diboron trioxide	1303-86-2	2012/06/18	Toxic for reproduction (Article 57 c)
171	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	2012/06/18	Carcinogenic (Article 57a)
172	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	2012/06/18	Toxic for reproduction (Article 57 c)
173	Lead(II) bis(methanesulfonate)	17570-76-2	2012/06/18	Toxic for reproduction (Article 57 c)
174	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)
175	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)
176	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)
177	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)
178	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	2012/06/18	Carcinogenic (Article 57a)
179	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)
180	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	2012/06/18	Toxic for reproduction (Article 57 c)
181	Lead styphnate	15245-44-0	2011/12/19	Toxic for reproduction (article 57 c)
182	Calcium arsenate	7778-44-1	2011/12/19	Carcinogenic (article 57 a)
183	Bis(2-methoxyethyl) ether	111-96-6	2011/12/19	Toxic for reproduction (article 57 c)
184	Phenolphthalein	77-09-8	2011/12/19	Carcinogenic (article 57 a)
185	Arsenic acid	7778-39-4	2011/12/19	Carcinogenic (article 57 a)
186	2-Methoxyaniline; o-Anisidine	90-04-0	2011/12/19	Carcinogenic (article 57 a)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
187	Potassium hydroxyoctaoxidizincatedichromate	11103-86-9	2011/12/19	Carcinogenic (article 57 a)
188	Bis(2-methoxyethyl) phthalate	117-82-8	2011/12/19	Toxic for reproduction (article 57 c)
189	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)
190	Dichromium tris(chromate)	24613-89-6	2011/12/19	Carcinogenic (article 57 a)
191	Pentazinc chromate octahydroxide	49663-84-5	2011/12/19	Carcinogenic (article 57 a)
192	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 (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight	-	2011/12/19	Carcinogenic (article 57 a)
193	Lead dipicrate	6477-64-1	2011/12/19	Toxic for reproduction (article 57 c)
194	N,N-dimethylacetamide	127-19-5	2011/12/19	Toxic for reproduction (article 57 c)
195	1,2-dichloroethane	107-06-2	2011/12/19	Carcinogenic (article 57 a)
196	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	2011/12/19	Carcinogenic (article 57 a)
197	Trilead diarsenate	3687-31-8	2011/12/19	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
198	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	2011/12/19	Carcinogenic (article 57 a)
199	Lead diazide, Lead azide	13424-46-9	2011/12/19	Toxic for reproduction (article 57 c),
200	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 (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight		2011/12/19	Carcinogenic (article 57 a)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
201	Cobalt dichloride	7646-79-9	2011/06/20 - 2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
202	1-Methyl-2-pyrrolidone	872-50-4	2011/06/20	Toxic for reproduction (article 57c)
203	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	2011/06/20	Toxic for reproduction (article 57c)
204	Hydrazine	302-01-2 7803-57-8	2011/06/20	Carcinogenic (article 57a)
205	1,2,3-Trichloropropane	96-18-4	2011/06/20	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
206	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	2011/06/20	Toxic for reproduction (article 57c)
207	Strontium chromate	7789-06-2	2011/06/20	Carcinogenic (article 57a)
208	2-Ethoxyethyl acetate	111-15-9	2011/06/20	Toxic for reproduction (article 57c)
209	2-Ethoxyethanol	110-80-5	2010/12/15	Toxic for reproduction (article 57c)
210	Cobalt(II) diacetate	71-48-7	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
211	Cobalt(II) carbonate	513-79-1	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
212	Cobalt(II) sulphate	10124-43-3	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
213	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)
214	Cobalt(II) dinitrate	10141-05-6	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
215	Chromium trioxide	1333-82-0	2010/12/15	Carcinogenic and mutagenic (articles 57 a and 57 b)
216	2-Methoxyethanol	109-86-4	2010/12/15	Toxic for reproduction (article 57c)
217	Trichloroethylene	79-01-6	2010/06/18	Carcinogenic (article 57 a)
218	Sodium chromate	7775-11-3	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
219	Boric acid	10043-35-3 11113-50-1	2010/06/18	Toxic for reproduction (article 57 c)
220	Potassium chromate	7789-00-6	2010/06/18	Carcinogenic and mutagenic (articles 57 a and 57 b).
221	Tetraboron disodium heptaoxide, hydrate	12267-73-1	2010/06/18	Toxic for reproduction (article 57 c)
222	Potassium dichromate	7778-50-9	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
223	Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	2010/06/18	Toxic for reproduction (article 57 c)
224	Ammonium dichromate	7789-09-5	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
225	Acrylamide	79-06-1	2010/03/30	Carcinogenic and mutagenic (articles 57 a and 57 b)
226	2,4-Dinitrotoluene	121-14-2	2010/01/13	Carcinogenic (article 57a)
227	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)
228	Anthracene oil, anthracene-low	90640-82-7	2010/01/13	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)
229	Pitch, coal tar, high temp.	65996-93-2	2010/01/13	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
230	Anthracene oil, anthracene paste	90640-81-6	2010/01/13	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)
231	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)

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No.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
232	Lead chromate	7758-97-6	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
233	Anthracene oil	90640-80-5	2010/01/13	Carcinogenic1, PBT and vPvB (articles 57a, 57d and 57e)
234	Diisobutyl phthalate	84-69-5	2010/01/13	Toxic for reproduction (article 57c)
235	Tris(2-chloroethyl)phosphate	115-96-8	2010/01/13	Toxic for reproduction (article 57c)
236	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
237	Anthracene oil, anthracene paste, distn. lights	91995-17-4	2010/01/13	Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)
238	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	2008/10/28	Carcinogenic (article 57a)
239	Triethyl arsenate	15606-95-8	2008/10/28	Carcinogenic (article 57a)
240	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	2008/10/28	vPvB (article 57e)
241	Benzyl butyl phthalate (BBP)	85-68-7	2008/10/28	Toxic for reproduction (article 57c)
242	Sodium dichromate	7789-12-0 10588-01-9	2008/10/28	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
243	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	2008/10/28	PBT and vPvB (articles 57 d and 57 e)
244	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)
245	Anthracene	120-12-7	2008/10/28	PBT (article 57d)
246	Dibutyl phthalate (DBP)	84-74-2	2008/10/28	Toxic for reproduction (article 57c)
247	Lead hydrogen arsenate	7784-40-9	2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
248	Diarsenic trioxide	1327-53-3	2008/10/28	Carcinogenic (article 57a)
249	Diarsenic pentaoxide	1303-28-2	2008/10/28	Carcinogenic (article 57a)
250	Bis(tributyltin)oxide (TBTO)	56-35-9	2008/10/28	PBT (article 57d)

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Change Log version 3.0	
CHEMICAL GROUP RSL	CHANGE LOG MAJOR CHANGES FROM RSL 2.0 TO RSL 3.0
ACETOPHENONE AND 2- PHENYL-2-PROPANOL	No changes
ACIDIC AND ALKALINE SUBSTANCES	Updated limit Updated relevance of restriction
ALKYLPHENOLS (AP) AND ALKYLPHENOL ETHOXYLATES (APEO)	Updated leather test method for NPEO/OPEO
AZO-AMINES AND ARYLAMINE SALTS	Updated leather test method
BIOCIDES	Removed category Moved substances to their own categories
BISPHENOLS	Removed Bisphenol AF Updated test method Updated limits Updated relevance of restriction
BROMINATED & ORGANOPHOSPHOROUS SUBSTANCES	Changed category name from FLAME RETARDANTS Added 4 substances
CHLOROBENZENES AND CHLOROTOLUENES	Updated test method
CHLORINATED PARAFFINS	No changes
CHLOROPHENOLS	Updated test method
CYCLOSILOXANES	Added new category
DIMETHYLFUMARATE (DMFu)	Added new category Moved substance from BIOCIDES category
DISPERSE DYES WHICH ARE CLASSIFIED TO BE ALLERGENIC	Added CAS number for Disperse Yellow 49
DYES WHICH ARE CLASSIFIED TO BE CARCINOGENIC	Added 1 substance
DYES, NAVY BLUE	Changed category name from DYES WHICH ARE ADDITIONALLY RESTRICTED Updated relevance of restriction
FLAME RETARDANTS	Changed category name to BROMINATED & ORGANOPHOSPHOROUS SUBSTANCES
FLUORINATED GREENHOUSE GASES	Updated regulation
FORMALDEHYDE	Updated relevance of restriction

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CHEMICAL GROUP RSL	CHANGE LOG MAJOR CHANGES FROM RSL 2.0 TO RSL 3.0
HEAVY METALS EXTRACTABLE	No changes
HEAVY METALS TOTAL CONTENT	No changes
HEAVY METALS RELEASABLE NICKEL	No changes
MONOMERS	Updated test method for vinyl chloride
N-NITROSAMINES	No changes
ORGANOTIN COMPOUNDS	Added 9 substances
ORTHO-PHENYLPHENOL (OPP)	Added new category Moved substance from BIOCIDES category Updated test method
OZONE DEPLETING SUBSTANCES	Updated regulation
PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS)	Updated overview based on latest information
PESTICIDES	Updated test method Updated relevance of restriction
PHTHALATES	Added 2 substances Updated relevance of restriction
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)	Updated test method
QUINOLINE	Updated relevance of restriction
SOLVENTS AND RESIDUALS	No changes
UV ABSORBERS / STABILIZERS	Added 1 substance Updated limit for UV328 Updated test method
VOLATILE ORGANIC COMPOUNDS (VOCs)	Moved substances to appendix Updated limit for 19 substances Added 21 substances
RESTRICTION ON PACKAGING	Updated regulation for heavy metals Updated limit for MOAH

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CHEMICAL GROUP RSL

CHANGE LOG MAJOR CHANGES FROM RSL 2.0 TO RSL 3.0

RISK MATRIX	Updated based on latest information
MATERIALS MATRIX	Updated based on latest information
PACKAGING MATRIX	Updated based on latest information
APPENDICES	Updated based on latest information
REACH CANDIDATE LIST	Updated from 235 to 250 substances