2023
VF Corporation
Restricted Substance List
(RSL)

Supplier Policy

Applicable to all products of
VF Corporation or any of its subsidiaries

Introduction

The Restricted Substance List (RSL) applies to all VF Products[1], including but not limited to apparel, footwear, equipment, accessories and other products of value. The RSL also applies to all Raw Materials[2], parts, trims, sundries, chemicals and other goods supplied or used in the manufacture of VF Products.

The RSL is an integral part of VF's quality and safety programs and must be shared with all vendors, suppliers and other players throughout the product supply chain.

Each supplier of VF Product or Raw Material represents and warrants that each of its materials (whether a VF Product or Raw Material) complies with all provisions of the RSL (including, but not limited to, the RSL prohibitions, restrictions and other requirements) and that the supplier agrees to indemnify and hold harmless VF Corporation and its subsidiaries and brands (collectively, "VF") from any claim, loss, damage or other detriment, resulting from any such supplier's non-compliance.

We require our suppliers and business partners to study this document carefully, implement management processes in their operations to comply with these requirements (including a verification process), and communicate the information to their internal teams and raw material suppliers.

We require each of our suppliers of VF Products or Raw Materials to certify their compliance to the 2023 VF Corporate RSL by executing the Supplier RSL Compliance Agreement (Section 1 of this document) and sending it to your respective VF sourcing manager.

Should you have any questions or concerns about this document, please do not hesitate to contact your VF corporate or brand contact person, one of the contact people listed in Appendix 1, or the general RSL mailbox for VF (rsl@vfc.com).

[1] VF Products encompasse all raw materials, including all chemical substances, and all other goods, provided to VF or its suppliers or finishing contractors for use in the manufacture or assembly of any finished product manufactured for, labelled by, offered for sale by, sold by, or distributed by, VF or any of its subsidiaries. These include apparel, non-apparel, footwear, accessories, equipment and all other items sold by, for, or on behalf of VF Corporation or one if its subsidiaries.

[2] Raw Materials are defined by any material or intermediary material used in the manufacture of a VF Product. Examples of Raw Materials include fabrics (natural or synthetic), leather, plastic parts, metal parts, chemicals, paint, rope, string, buttons, zippers, snaps, or any other good used in the production of a VF Product.

Section 1 VF Corporation 2023 RSL Compliance Agreement

VF Corporation and each of its subsidiaries, business units and brands (collectively, "VF") requires each supplier of VF Products or Raw Materials to confirm its understanding of the VF Restricted Substance List (RSL) by executing the following VF 2023 RSL Supplier Compliance Agreement. Each supplier of a VF Product or Raw Material represents and warrants that each of its materials complies with all provisions of the RSL (including, but not limited to, the RSL prohibitions, restrictions and other requirements) and that the supplier will indemnify and hold harmless VF from any claim, loss, damage or other detriment, resulting from any such supplier's non-compliance.

We require our suppliers and business partners to study this document carefully, implement management and verification (testing and auditing) processes in their operations to comply with these requirements, and communicate the information to their internal teams and raw material suppliers.

We require each of our suppliers of VF Products or Raw Materials to certify their compliance to the 2023 VF Corporate RSL by executing the Supplier RSL Compliance Agreement (Section 1 of this document) and sending the executed agreement to your respective VF sourcing manager.

The effective implementation date of this document is April 1st, 2023. All suppliers are required to fill out all info fields at the bottom part of the VF Corporation 2023 RSL Compliance Agreement (p.6).

VF Corporation 2023 RSL Supplier Compliance Agreement

We understand that VF's Restricted Substance List program is an important aspect of the business of VF Corporation and its subsidiaries and brands (collectively, "VF") and adds significant value to VF's brands. Accordingly, we hereby declare and agree that:

- We have received, read, fully understand and will keep fully apprised of VF's Restricted Substance List, including its prohibitions, limitations and requirements, which may be amended from time to time, hereafter the "RSL";
- Compliance with the RSL is a condition to and incorporated in each and every order placed by VF or one of VF's subsidiaries or business units; each shipment constitutes our warranty that the materials, parts, chemicals and other goods shipped by us fully comply with the RSL;
- We understand and agree that every order VF gives us is in reliance on this agreement;
- We certify that each current and future material, part, chemical and other good, that we supply or otherwise deliver to VF meets, and will continue to meet, each prohibition, limitation and other requirement of the RSL;
- VF reserves the right, but not the obligation, to test, by the RSL-specified method, or other appropriate method, any ordered material, part, chemical and other good, at any time or stage of production;
- We agree to keep available for at least ten (10) years from the delivery date of any order to VF, all information concerning any substances we use in manufacturing VF's orders.
- Failure to comply with the RSL is a material breach of any agreement we have with VF, notwithstanding any other term of that agreement;
- We do and will continue to hold VF, its agents and its employees harmless against, and will defend and indemnify VF, its agents and its employees against, any and all claims, losses, liabilities, expenses, and damages, including reasonable attorney's fees and costs, caused by our failure to comply with any prohibition, limitation or other requirement of the RSL or this Agreement.
- Notwithstanding anything to the contrary, we agree and accept any and all terms, conditions, guidelines and/or instructions stipulated and given under VF's Restricted Substance List ("RSL") and VF's RSL Implementation Manual as well as any policies in connection with RSL that may be communicated by VF from time to time.

The undersigned is an owner, director, officer or managing agent, authorized to agree to and sign this Agreement on behalf of the company identified below.

Printed name:	_____	**Company:**	_____
Position:	_____		_____
		Address:	_____
			_____
Signature:	_____		_____
E-mail Address:	_____	**Date:**	_____

Send the executed Compliance Agreement to the attention of the appropriate VF RSL Contact as specified in Appendix 1 or e-mail it to rsl@vfc.com

FOREWORD

For dated test methods, only the edition cited applies. For undated references, the latest edition of the referenced test methods (including any amendments) applies.

Section 2 Substances Which May Be Found in Some Products

This section lists the substances which may be found in VF Products and are of primary focus for VF Corporation and its subsidiaries (collectively referred to herein as "VF"). The substances, limit values and test methods listed in Section 2 shall be diligently studied and understood by each supplier of a VF Product or Raw Material. Each supplier must develop a management system to ensure all materials produced meet each and every requirement of this Section.

This section contains limitation on the following groups of substances or substance restrictions based on product type:

- Aromatic Amines from Azo Dyes
- Alkyl Phenols and Alkyl Phenol Ethoxylates (APs and APEOs)
- Bisphenols
- Chlorinated Aromatics
- Chlorinated Paraffins
- Dimethylfumarate
- Disperse Dyes and Other Dyes
- Formaldehyde
- Metals
- Monomers
- Flame Retardants
- Nitrosamines
- Organotin Compounds
- PFAS
- Phthalates
- Polycyclic Aromatic Hydrocarbons (PAH)
- Preservatives for leather
- Siloxanes
- Solvents and Volatile Organic Compounds (VOCs)
- Others
- Restrictions on Packaging
- Electrical and Electronic Equipment
- Food Contact Materials
- Toys
- Phase-Out and Unintentionally Present Substances

RECYCLED MATERIAL

Products manufactured with recycled material (fibers, polymers, down) have to fulfil the requirements defined by the VF RSL. Vendors and suppliers have to set in place and agree with VF on an appropriate testing program to guarantee compliance on all production and batches of recycled material.

Specific exemptions might be granted by the existing legislation of the destination market and would derogate the limits set in the VF RSL. Contact the Global Prouct Stewardship team for further information.

A. Aromatic Amines from Azo Dyes

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)[3]	Test Method
4-Aminoazobenzene[4]	60-09-3	20[5]	**Textile:** ISO 14362-1 **Natural leather:** ISO 17234-1 **Products for China market:** China Standard GB 18401 **Textile:** GB/T 17592 China Standard GB 20400 **Natural leather:** GB/T 19942
o-Aminoazotoluene	97-56-3		
4-Aminodiphenyl	92-67-1		
2-Amino-4-nitrotoluene	99-55-8		
o-Anisidine	90-04-0		
Benzidine	92-87-5		
p-Chloroaniline	106-47-8		
4-Chloro-o-toluidine	95-69-2		
p-Cresidine	120-71-8		
2,4-Diaminoanisole	615-05-4		
4,4´-Diamino-diphenylmethane	101-77-9		
3,3´-Dichlorobenzidine[6]	91-94-1		
3,3´-Dimethoxybenzidine	119-90-4		
3,3´-Dimethylbenzidine	119-93-7		
3,3´-Dimethyl-4,4´-diamino-diphenylmethane	838-88-0		
4,4´-Methylene-bis-(2-chloraniline)	101-14-4		
2-Naphthylamine	91-59-8		
4,4´-Oxydianiline	101-80-4		
4,4´-Thiodianiline	139-65-1		
2,4-Toluenediamine	95-80-7		
o-Toluidine	95-53-4		
2,4,5-Trimethylaniline	137-17-7		
2,4-Xylidine	95-68-1		
2,6-Xylidine	87-62-7		
Aniline	62-53-3	Reporting requiment	

A1. Aromatic Amines salts

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
4-Chloro-o-toluidinium chloride	3165-93-3	30	**Textile:** ISO 14362-1 **Natural leather:** ISO 17234-1
2-Naphthylammoniumacetate	553-00-4		
4-Methoxy-m-phenylene diammonium sulphate; 2,4-Diaminoanisole sulphate	39156-41-7		
2,4,5-Trimethylaniline hydrochloride	21436-97-5		

[3] The concentration limit is set for each substance as measured on the final product and represents the maximum allowable amount of the respective substance which is allowable in a RSL-compliant product. Any reference to the term "Usage Ban" indicates that the substance for which there is a usage ban is prohibited from use but that an acceptable trace amount is allowed up to the designated trace value ("TR"). Any reference to the term "Not Detected" indicates that the substance must not be detected in the final product.
[4] For analysis of 4-Aminoazobenzene, use test method ISO 14362-3 or GB/T 23344 for textiles and ISO 17234-2 for leather.
[5] The testing laboratory shall report all listed aromatic amines found between the 5 mg/kg reportin limit and the 20 mg/kg limit value in the final product. See Appendix 3: Reporting limits.
[6] 3,3'-dichlorobenzidine has been reported to be found when printing using a combination of Pigment Black 7 with either Pigment Orange 13 or Pigment Orange 34. This combination of pigments shall be avoided.

B. Alkyl Phenols and Alkyl Phenol Ethoxylates (APs and APEOs)

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Nonylphenol (NP), mixed isomers	Various	Usage Ban [TR=10, total sum of AP] [TR=100, total sum of AP and APEO]	**Down:** GB/T 23322 **Other materials:** ISO 21084
Octylphenol (OP), mixed isomers	Various		
Nonylphenol ethoxylates (NPEO)	Various		**Textile:** ISO 18254-1 **Natural Leather:** ISO 18218-1 **Down:** GB/T 23322
Octylphenol ethoxylates (OPEO)	Various		

C. Bisphenols

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Bisphenol A (BPA)	80-05-7	25[7]	**All materials:** Extraction in tetrahydrofuran (sonication at 60°C for 60 min) + LC-MS **Sunglasses:** Acetonitrile extraction (OEHHA method) / LC-MS
Bisphenol B (BPB)	77-40-7	1,000	
Bisphenol S (BPS)	80-09-1	1,000	
Bisphenol F (BPF)	620-92-8	Reporting requirement	
Bisphenol AF (BPAF)	1478-61-1		

D. Chlorinated Aromatics

D1. Chlorobenzenes and chlorotoluenes

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Chlorobenzene	108-90-7	Usage Ban [TR=4]	EN 17137
1,2-Dichlorobenzene	95-50-1		
1,3-Dichlorobenzene	541-73-1		
1,4-Dichlorobenzene	106-46-7		
1,2,3-Trichlorobenzene	87-61-6		
1,2,4-Trichlorobenzene	120-82-1		
1,3,5-Trichlorobenzene	108-70-3		
1,2,3,4-Tetrachlorobenzene	634-66-2		
1,2,3,5-Tetrachlorobenzene	634-90-2		

[7] Different limits might be set according to the specific product category. See following sections of the RSL and contact your VF reference person.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
1,2,4,5-Tetrachlorobenzene	95-94-3		
Pentachlorobenzene	608-93-5		
Hexachlorobenzene	118-74-1		
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		
α-Chlorotoluene	100-44-7	1	
α,α,α-Trichlorotoluene	98-07-7	1	
α,α,α,4-Tetrachlorotoluene	5216-25-1	1	

D2. Chlorophenols

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
2-Chlorophenol	95-57-8	Reporting requirement	**Textile:** DIN 50009 **Natural leather:** ISO 17070
3-Chlorophenol	108-43-0		
4-Chlorophenol	106-48-9		
2,3-Dichlorophenol	576-24-9		
2,4-Dichlorophenol	120-83-2		
2,5-Dichlorophenol	583-78-8		
2,6-Dichlorophenol	87-65-0		
3,4-Dichlorophenol	95-77-2		
3,5-Dichlorophenol	591-35-5		
2,3,4-Trichlorophenol	15950-66-0	Not Detected	
2,3,5-Trichlorophenol	933-78-8		
2,3,6-Trichlorophenol	933-75-5		
2,4,5-Trichlorophenol	95-95-4		
2,4,6-Trichlorophenol	88-06-2		
3,4,5-Trichlorophenol	609-19-8		
2,3,4,5-Tetrachlorophenol	4901-51-3		
2,3,4,6-Tetrachlorophenol	58-90-2		
2,3,5,6-Tetrachlorophenol	935-95-5		
Pentachlorophenol (PCP)	87-86-5		
o-Phenylphenol (OPP)	90-43-7	100	

E. Chlorinated Paraffins[8]

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Short chain chlorinated paraffins (SCCP) (C10-C13)	85535-84-8	1,000	Leather: ISO 18219-1 (SCCP) ISO 18219-2 (MCCP) Textiles: ISO 22818 (SCCP + MCCP)
Medium chain chlorinated paraffins (MCCP) (C14-C17)	85535-85-9	1,000	

F. Dimethylfumarate

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Dimethylfumarate (DMFu)	624-49-7	Usage Ban [TR=0.1]	**Textile:** EN 17130 **All other materials:** ISO 16186

G. Disperse Dyes and Other Dyes

G1. Disperse Dyes

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Disperse Blue 1	2475-45-8	Not Detected	DIN 54231
Disperse Blue 3	2475-46-9		
Disperse Blue 7	3179-90-6		
Disperse Blue 26	3860-63-7		
Disperse Blue 35	12222-75-2		
Disperse Blue 102	12222-97-8		
Disperse Blue 106	12223-01-7		
Disperse Blue 124	61951-51-7		
Disperse Brown 1	23355-64-8		
Disperse Orange 1	2581-69-3		
Disperse Orange 3	730-40-5		
Disperse Orange 11	82-28-0		
Disperse Orange 37/59/76	12223-33-5 13301-61-6 51811-42-8		
Disperse Orange 149	85136-74-9		
Disperse Red 1	2872-52-8		
Disperse Red 11	2872-48-2		
Disperse Red 17	3179-89-3		

[8] Limit applies to other uses than as flame retardant, which is banned.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Disperse Red 151	61968-47-6		
Disperse Yellow 1	119-15-3		
Disperse Yellow 3	2832-40-8		
Disperse Yellow 7	6300-37-4		
Disperse Yellow 9	6373-73-5		
Disperse Yellow 23	6250-23-3		
Disperse Yellow 39	12236-29-2		
Disperse Yellow 49	54824-37-2		
Disperse Yellow 56	54077-16-6		
Disperse Blue 291	56548-64-2	Reporting requirement[9]	
Disperse Violet 1	128-95-0		
Disperse Violet 93	122463-28-9 52697-38-8 268221-71-2		
Disperse Yellow 64	10319-14-9		

G2. Other dyes

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Acid Red 26	3761-53-3	Not Detected	DIN 54231
Basic Blue 26	2580-56-5		
Basic Green 4	569-64-2 2437-29-8 10309-95-2		
Basic Red 9	569-61-9		
Basic Violet 3	548-62-9		
Basic Violet 14	632-99-5		
Direct Black 38	1937-37-7		
Direct Blue 6	2602-46-2		
Direct Red 28	573-58-0		
Direct Brown 95	16071-86-6		
Solvent Blue 4	6786-83-0		
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1		
4-Dimethylaminoazobenzene (Solvent Yellow 2)	60-11-7		
Acid Violet 49	1694-09-3	Reporting requirement	
Basic Violet 1	8004-87-3		

[9] VF utilizes best efforts to track the existence of these Disperse Dyes in the Supply Chain. Doing so allows VF to employ a proactive approach for possible substitution, based on restrictions on use which are currently the subject of review in the context of ECHA Restrictions on Disperse Dyes. Suppliers are required to provide information on the use of these chemicals for the manufacture of VF products.
VF may review detection limits of these disperse dyes to decide on the potential need for corrective actions including but not limited to material and product disposition depending on amounts, product type, and intended usage.

G3. Navy Blue[10]

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Component 1: $C_{39}H_{23}ClCrN_7O_{12}S \cdot 2Na$	118685-33-9	1000	DIN 54231
Component 2: $C_{46}H_{30}CrN_{10}O_{20}S_2 \cdot 3Na$	Not allocated		

H. Formaldehyde

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Formaldehyde[11,12]	50-00-0	Children: 20 Adults: (with direct skin contact): [13] 75 Adults (without direct skin contact): [14] 300	**Textile:** ISO 14184-1 **Natural Leather:** ISO 17226-1 **Wood** EN 717-3 **Paper** EN 645 or EN 1541 **Products for China market:** GB/T 19941

[10] An azo colorant with EC number 405-665-4, that is a mixture of *disodium(6-(4-anisido)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-2-naphtholato)(1-(5-chloro-2-oxidophenylazo)-2-naphtolato)chromate(1-)* <CAS nr 118685-33-9> and *trisodium bis(6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophe-nylazo)-1-naphtolato)chromate(1-)*- .
[11] EXCEPTION: For baby products (age 0 - 36 months) intended for the Japanese market, the formaldehyde concentration must be below an absorbency (A-A_0) limit of 0.05 using JIS L1041-2011, Method A.
[12] Suppliers must communicate the use of formaldehyde donors to VF corporate or brand contact person (Appendix 1).
[13] Direct skin contact: any part of the product (e.g.: collar, cuff, body, sleeves) that is in direct and prolonged contact with the skin (e.g.: leather gloves without inner lining) during normal use. Check Appendix 2: Definitions.
[14] Without direct skin contact: any part of the product which is not direct and prolonged contact with the skin, e.g. a leather jacket with a lining; on the contrary, leather products without lining are considered as in direct skin contact. Check Appendix 2: Definitions.

I. Metals

I1. Metal Restrictions for All Base Textile Materials and Fabrics

(including natural, synthetic, leather, surface coatings and paints)

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)		Test Method
Extractable Metal Content		**Non-Leather**	**Leather**	
Antimony (Sb)	7440-36-0	30	30	**Non-Leather:** EN 16711-2 **Leather:** ISO 17072-1
Arsenic (As)	7440-38-2	Usage Ban [TR=0.2]	Usage Ban [TR=0.2]	
Cadmium (Cd)	7440-43-9	Usage Ban [TR=0.1]	Usage Ban [TR=0.1]	
Chromium (Cr)	7440-47-3	1	N/A	
Cobalt (Co)	7440-48-4	1	4	
Copper (Cu)[15]	7440-50-8	25	50	
Lead (Pb)	7439-92-1	Usage Ban [TR=0.2]	Usage Ban [TR=0.2]	
Mercury (Hg)	7439-97-6	Usage Ban [TR=0.02]	Usage Ban [TR=0.02]	
Nickel (Ni)[15]	7440-02-0	1	N/A	
Chromium, Hexavalent Cr(VI)	18540-29-9	1	Not Detected [RL=3]	**Leather:** ISO 10195 Method A2 + ISO 17075[16]
Total Metal Content		**Non-Leather**	**Leather**	
Cadmium (Cd)	7440-43-9	40		**Non-Leather:** EN 16711-1 **Leather:** ISO 17072-2
Lead (Pb)	7439-92-1	90		CPSC-CH-E1002-08 in non-metal CPSC-CH-E1003-09 in paint and surface coating

[15] Materials used for RFID applications and static dissipation may contain copper and/or nickel serving a functional purpose. The limits listed may not be applicable. Reach your VF brand-specific product safety team (Appendix 1) for further guidance.
[16] ISO 17075-2 determination of Chromium (VI) content in leather by chromatography is less affected by interferences; therefore is to be preferred rather than ISO 17075-1.

I2. Metal Restrictions for All Parts, Metal and Non-Metal

(*including sundries, trims, buckles, toys*[17]*, plastic parts, plastic fabrics, surface coatings and paints)*

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Extractable Metal Content		**Children**	
Antimony (Sb)	7440-36-0	60	EN 71-3
Arsenic (As)	7440-38-2	25	
Barium (Ba)	7440-39-3	250	
Cadmium (Cd)	7440-43-9	17	
Chromium (Cr)	7440-47-3	25	
Chromium, Hexavalent Cr(VI)[18]	18540-29-9	0.053	
Cobalt	7440-48-4	130	
Lead (Pb)	7439-92-1	23	
Mercury (Hg)	7439-97-6	25	
Nickel (Ni)	7440-02-0	930	
Selenium (Se)	7782-49-2	460	
Nickel release[19]	7440-02-0	**Children and Adult** 0.5 µg/cm²/week	EN 1811[20] EN 16128[21]
Total Metal Content		**Children and Adult**	
Cadmium (Cd)	7440-43-9	40	EN 16711-1
Lead (Pb)	7439-92-1	90	ASTM F2853 in paint and surface coating GAFTI Modified CPSC-CH-E1001-08 in metal CPSC-CH-E1002-08 in non-metal CPSC-CH-E1003-09 in paint and surface coating

[17] Toys, toy components and toy materials must be reviewed by VF brand-specific product safety team to determine all appropriate requirements. They are required to meet various chemical requirements and are also subject to pass strict mechanical and product safety testing.
[18] Chromium VI needs only to be tested for toys.
[19] Nickel release only needs to be tested for those parts that are in direct and prolonged contact with the skin. Check Appendix 2: Definitions.
[20] For non-coated metallic parts or metallic parts with nickel containing surface coating, test in accordance with method EN 1811. For metallic parts with non-nickel containing surface coating or plating, perform EN 12472 then test in accordance with method EN 1811. The same limit applies regardless of the test method used.
[21] Method EN 16128 is for those parts of spectacle frames and sunglasses intended to come in close and prolonged contact with the skin. VF accept as proof of conformity only test results based on the EN 12472 simulation of wear and subsequent migration test according to EN 16128. Results based on the EIS coating test won't be considered valid.

I3. Metal Restrictions for All Jewelry

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Extractable Metal Content		**Children and Adult**	
Antimony (Sb)	7440-36-0	60	EN 71-3
Arsenic (As)	7440-38-2	25	
Barium (Ba)	7440-39-3	250	
Cadmium (Cd)	7440-43-9	17	
Chromium (Cr)	7440-47-3	25	
Cobalt	7440-48-4	130	
Lead (Pb)	7439-92-1	23	
Mercury (Hg)	7439-97-6	25	
Nickel (Ni)	7440-02-0	930	
Selenium (Se)	7782-49-2	460	
Nickel (Ni), non-pierced[22]	7440-02-0	0.5 µg/cm²/week	EN 1811[23]
Nickel (Ni), pierced	7440-02-0	0.2 µg/cm²/week	
Total Metal Content		**Children and Adult**	
Cadmium (Cd)	7440-43-9	40	EN 16711-1
Lead (Pb)	7439-92-1	40	ASTM F2853 in paint and surface coating GAFTI Modified CPSC-CH-E1001-08 in metal CPSC-CH-E1002-08 in non-metal CPSC-CH-E1003-09 in paint and surface coating

J. Monomers

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Styrene, Free	100-42-5	500	Extraction in methanol (sonication at 60°C for 60 min) + GC-MS
Vinyl chloride monomer	75-01-4	1	ISO 6401

[22] Test on component level.
[23] For metallic parts without a surface coating or plating, test in accordance with method EN 1811. For metallic parts with a surface coating or plating, perform EN 12472 then test in accordance with method EN 1811. The same limit applies regardless of the test method used.

K. Flame Retardants

K1. Flame Retardant Restrictions For All Products – Subject to the Further Specific Bans and Limitations in Sections K2 and K3

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Short chain chlorinated paraffins (SCCP) (C10-C13)	85535-84-8	Usage Ban [TR=100]	Combined CADS/ISO 18219 method V1:06/17 Extraction ISO 18219 and analysis by GC-NCI-MS
Medium chain chlorinated paraffins (MCCP) (C14-C17)	85535-85-9		
Hexabromocyclododecane (HBCDD)[24]	25637-99-4	Usage Ban [TR=5]	ISO 17881-1 ISO 17881-2
Polybrominated biphenyls (PBB)	59536-65-1 36355-01-8		
Decabromodiphenyl ethane (DBDPE)	84852-53-9		
Tetrabromodiphenyl ether (tetraBDE)	5436-43-1 40088-47-9 and others		
Pentabromodiphenyl ether (pentaBDE)	32534-81-9 and others		
Hexabromodiphenyl ether (hexaBDE)	68631-49-2 207122-15-4 36483-60-0		
Heptabromodiphenyl ether (heptaBDE)	446255-22-7 207122-16-5 68928-80-3		
Octabromodiphenyl ether (octaBDE)	32536-52-0		
Decabromodiphenyl ether (decaBDE)	1163-19-5		
Tetrabromobisphenol A (TBBP A)	79-94-7		
Tri-o-cresyl phosphate	78-30-8		
Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7		
Bis(2,3-dibromopropyl) phosphate	5412-25-9		
2,2-Bis(bromomethyl)propane-1,3-diol (BBMP)	3296-90-0		
Trimethyl phosphate	512-56-1		
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8		
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8		
Trixylyl phosphate (TXP)	25155-23-1		
Tris(1-aziridinyl)-phosphate oxide (TEPA)	545-55-1		
Tris(1-chloro-2-propyl) phosphate (TCPP)	13674-84-5		
All other Polybrominated diphenyl ethers (PBDE)	Various	Reporting requirement[25]	

[24] Hexabromocyclododecane includes hexabromocyclododecane (25637-99-4), 1,2,5,6,9,10-hexabromocyclo-dodecane and its main diastereoisomers (3194-55-6): alpha-hexabromocyclododecane (134237-50-6); beta-hexabromocyclododecane (134237-51-7); and gamma-hexabromocyclododecane (134237-52-8).
[25] The testing laboratory shall report the presence of all other PBDE when testing for flame retardants.

K2. Flame Retardant Restrictions for children's products

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
2-Ethylhexyl 2,3,4,5-Tetrabromobenzoate (TBB)	183658-27-7	Usage Ban [TR=5]	ISO 17881-1 ISO 17881-2
Bis(2-ethylhexyl)-2,3,4,5-tetrabromophthalate (TBPH)	26040-51-7		
Triphenyl phosphate (TPP)	115-86-6		
2,2-Bis(Chloromethyl) Trimethylene Bis[Bis(2-Chloromethyl) phosphate] (V6)	38051-10-4		
4-(tert-butyl)phenyl diphenyl phosphate (MDPP)	56803-37-3		
di-tert-butylphenyl phenyl phosphate (DBPP)	65652-41-7		
Tris(4-tert-butylphenyl) phosphate (TBPP)	78-33-1 28777-70-0		
Other organohalogen Flame Retardants	Various	Usage Ban [TR=5]	ISO 17881-1 ISO 17881-2
Other Flame Retardants[26]	Various	Reporting requirement	

K3. Flame Retardant Restrictions for upholstered furniture and juvenile products for residential use[27, 28]

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
All flame retardants[26]	Various	Usage Ban[29] [TR=5]	Solvent extraction / GC-MS or LC-MS ISO 17881-1 ISO 17881-2

The design and bill of materials for each type of upholstered product and juvenile product intended to be manufactured, labelled, offered for sale, sold or distributed by VF, must be pre-approved by the Product Stewardship group (see Appendix 1) before any of these activities occur.

The VF Product Stewardship group approval process will include a screening program test to determine whether there is any flame retardant present in the product which would result in a non-compliance with the applicable law.

The screening program test aims also to detect any chemical substance usage with a different primary function but which may also act as flame retardant.

[26] Each testing laboratory shall report to the VF Product Stewardship group any amount of any flame retardant chemical detected in any raw material, including any chemical substance, or any other goods, intended for use in any VF product.
[27] Juvenile product means a children's product intended for residential use, including but not limited to a bassinet, booster seat, changing pad, floor play mat, highchair, highchair pad, infant bouncer, infant carrier, infant seat, infant swing, infant walker, nursing pad, nursing pillow, playpen side pad, play yard, portable hook-on chair, stroller and children's nap mat.
[28] Flame retardants are banned in upholstered furniture and juvenile products children which are placed into market in the City of San Francisco (Ordinance No. 211-17). All upholstered furniture must be affixed with a label that meets the requirements of Section 19094 of the Business and Professions Code, and states that the item does not contain flame retardant chemical(s).
[29] The intentional use of Flame Retardant is prohibited for upholstered furniture and juvenile products. Residual or trace concentrations may be found: contact the Product Stewardship for further action.

L. N-Nitrosamines

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
N-Nitrosodimethylamine	62-75-9	Usage Ban [TR=0.5]	GB/T 24153 with LC-MS/MS verification if positive ISO 19577
N-nitrosodiethylamine	55-18-5		
N-nitrosodipropylamine	621-64-7		
N-nitrosodibutylamine	924-16-3		
N-nitrosopiperidine	100-75-4		
N-nitrosopyrrolidine	930-55-2		
N-nitrosomorpholine	59-89-2		
N-nitroso-N-methylaniline	614-00-6		
N-nitroso-N-ethylaniline	612-64-6		

M. Organotin Compounds

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Dibutyltin (DBT) compounds	Various	1	ISO 22744-1
Tributyltin (TBT) compounds	Various	Not Detected	
Triphenyltin (TPhT) compounds	Various		
Dioctyltin (DOT) compounds	Various	1	
Monobutyltin (MBT) compounds	Various	Reporting requirement	
Tricyclohexyltin (TCyHT) compounds	Various		
Trimethyltin (TMT) compounds	Various		
Trioctyltin (TOT) compounds	Various		
Tripropyltin (TPT) compounds	Various		
Other organotins[30]	Various		

[30] The testing laboratory shall report all detected organotins, not only those restricted by the VF RSL.

N. PFAS[31]

N1. PFOS, its salts and derivatives

Chemical Substance	CAS Number	Limit Value Final Product (µg/m²)	Test Method
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	Usage Ban [TR=1 µg/m²]	ISO 23702-1
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3		
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5		
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)	29081-56-9		
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)	70225-14-8		
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C2H5)4)	56773-42-3		
N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2		
N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	31506-32-8		
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2		
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-7		
Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7		
Perfluorooctane sulfonamide (PFOSA)	754-91-6		
1-Decanaminium, N-decyl-N,N-dimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid	251099-16-8		
Other salts or derivatives	Various		

[31] VF commits to eliminate all PFAS chemistry use by 2025. Section 2Y2VF may modify PFAS-related restrictions at anytime as needed to comply with emerging and applicable legal requirements. Further information regarding PFAS restrications are found in Section Y2, Phase-Out of PFAS.

N2. PFOA and its salts

Chemical Substance	CAS Number	Limit Value Final Product (µg/m²)	Test Method
Perfluorooctanoic acid (PFOA)	335-67-1	Usage Ban[32]	ISO 23702-1
Sodium perfluorooctanoate (PFOA-Na)	335-95-5		
Potassium perfluorooctanoate (PFOA-K)	2395-00-8		
Silver perfluorooctanoate (PFOA-Ag)	335-93-3		
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0		
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1		
Other PFOA salts	Various		

N3. PFOA related substances

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
1H,1H,2H,2H -Perfluorodecane sulphonic acid	39108-34-4	Usage Ban [TR=1 mg/kg]	ISO 23702-1
Methyl perfluorooctanoate (Me-PFOA)	376-27-2		
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5		
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7		
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9		
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9		
Other PFOA related substances[33]	Various		

[32] The TR is 1 µg/m² or 25 ppb (whichever is lower) based on the weight of the fabric.
[33] Complete definition. PFOA related substances (including its salts and polymers)

- having a linear or branched perfluoroheptyl group with the formula C_7F_{15}- directly attached to another carbon atom, as one of the structural elements.
- having a linear or branched perfluorooctyl group with the formula C_8F_{17}- as one of the structural elements.

N4. Long-chain perfluorocarboxylic acids (PFCAs) and their salts

Chemical Substance	CAS Number	Limit Value Final Product (µg/kg)	Test Method
Perfluorononanoic acid (PFNA, C9-PFCA)	375-95-1	Usage Ban [TR=25 µg/kg as a sum]	ISO 23702-1
Nonadecafluorodecanoic acid (PFDA, C10-PFCA)	335-76-2		
Henicosafluoroundecanoic acid (PFUnDA, C11-PFCA)	2058-94-8		
Tricosafluorododecanoic acid (PFDoDA, C12-PFCA)	307-55-1		
Pentacosafluorotridecanoic acid (PFTrDA, C13-PFCA)	72629-94-8		
Heptacosafluorotetradecanoic acid (PFTDA, C14-PFCA)	376-06-7		
C9-C14 PFCAs salts	Various		

N5. Long-chain perfluorocarboxylic acids (PFCAs) related substances

Chemical Substance	CAS Number	Limit Value Final Product (µg/kg)	Test Method
C9-C14 PFCAs related substances[34]	Various	Usage Ban [TR=260 µg/kg as a sum]	ISO 23702-1

N6. Short chain perfluorocarboxylic acids (C6)

Chemical Substance	CAS Number	Limit Value Final Product (µg/kg)	Test Method
Undecafluorohexanoic acid (PFHxA)	307-24-4	Reporting requirement	ISO 23702-1
PFHxA salts and related substances	Various		
Perfluorohexane-1-sulfonic acid (PFHxS)	355-46-4		
PFHxS salts and related substances	Various		

[34] Having a perfluoro group with the formula CnF2n+1- directly attached to another carbon atom, where n = 8, 9, 10, 11, 12 or 13. Having a perfluoro group with the formula CnF2n+1- that is not directly attached to another carbon atom, where n = 9, 10, 11, 12, 13 or 14 as one of the structural elements.

N7. Total Organic Fluorine

Beginning in 2023, all Durable Water Repellent treatments and waterproof membranes shall be tested for the presence of Total Organic Fluorine and authorized by VF based on test reports' results.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Total Organic Fluorine	-	Reporting requirement 100 mg/kg from Jan 2025 50 mg/kg from Jan 2027	Ion exchange chromatography and combustion ion chromatography

O. Phthalates

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)		Test Method
		All Products	Toys, Childcare and Children's products	
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	Usage Ban [TR=500 each phthalate; 1,000 total sum phthalates]	Usage Ban [TR=500] each phthalate; 1,000 total sum phthalates]	GAFTI Modified CPSC-CH-C1001-09.4
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8			
Butyl benzyl phthalate (BBP)	85-68-7			
Dibutyl phthalate (DBP)	84-74-2			
Dicyclohexyl phthalate (DCHP)	84-61-7			
Di-heptyl, nonyl, undecyl phthalate (DHNUP)	68515-42-4			
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4			
Di-iso-butyl phthalate (DIBP)	84-69-5			
Di-iso-hexyl phthalate	71850-09-4			
Di-iso-heptyl phthalate (DIHP)	71888-89-6			
Di-iso-nonyl phthalate (DINP)	28553-12-0 68515-48-0			
Di-iso-decyl phthalate (DIDP)	26761-40-0 68515-49-1			
Di-n-hexyl phthalate (DnHP or DHEXP)	84-75-3			
Di-n-octyl phthalate (DNOP)	117-84-0			
N-pentyl-iso-pentyl phthalate (NPIPP)	776297-69-9			
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0			
Di-iso-pentyl phthalate (DIPP)	605-50-5			
Di-n-pentyl phthalate (DnPP or DPENP)	131-18-0			
1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters	68648-93-1			
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters	68515-51-5			
Di-iso-octyl phthalate (DIOP)	27554-26-3	Reporting requirement		
Diethyl phthalate (DEP)	84-66-2			
Dimethyl phthalate (DMP)	131-11-3			
Other esters of orthophthalic acid[35]	Various		Reporting requirement	

[35] The testing laboratory shall report all detected phthalates, not only those restricted by the VF RSL. Identification is based on the detection of m/z 149.

P. Polycyclic Aromatic Hydrocarbons (PAH)

P1. PAH Restrictions for Textiles and All Accessible Plastic and Rubber Parts

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Benzo[a]pyrene	50-32-8	1[36] [Each PAH]	**Textile:** EN 17132 **Other:** AfPS GS 2019:01
Benzo[e]pyrene	192-97-2		
Benzo[a]anthracene	56-55-3		
Chrysene	218-01-9		
Benzo[b]fluoranthene	205-99-2		
Benzo[j]fluoranthene	205-82-3		
Benzo[k]fluoranthene	207-08-9		
Dibenzo[a,h]anthracene	53-70-3		
Acenaphthene	83-32-9	10 [Sum of 18 PAHs]	
Acenaphthylene	208-96-8		
Anthracene	120-12-7		
Benzo[ghi]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		

P2. PAH Restrictions for Toys and Childcare articles

The PAH concentration limit for toys and childcare articles is 0.5 mg/kg for each individual PAH limited at 1 mg/kg in the table above.

Q. Preservatives for leather

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
p-chloro-m-cresol (PCMC)	59-50-7	Reporting requirement[37]	ISO 13365
2-(Thiocyanomethylthio)benzothiazole (TCMBT)	21564-17-0		
2-octyl-2H-isothiazol-3-one (OIT)	26530-20-1		
o-Phenylphenol (OPP)	90-43-7		

[36] Any rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the skin or the oral cavity, under normal or reasonably foreseeable conditions of use.
[37] Suppliers of raw material must disclose the use of these chemical substances with communication to their VF corporate or brand contact person.

R. Siloxanes

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Octamethylcyclotetrasiloxane (D4)	556-67-2	1,000	Solvent extraction / GC-MS
Decamethylcyclopentasiloxane (D5)	541-02-6	1,000	
Dodecamethylcyclohexasiloxane (D6)	540-97-6	1,000	

S. Solvents and Volatile Organic Compounds (VOCs)

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Benzene	71-43-2	Usage Ban [TR=5]	Extraction in methanol (sonication at 60°C for 60 min) + GC-MS **DMAC, DMF, NMP:** ISO/TS 16189
Styrene	100-42-5	500	
1,1,1,2-Tetrachloroethane	630-20-6	1,000 total sum VOC	
1,1,1-Trichloroethane	71-55-6		
1,1,2,2-Tetrachloroethane	79-34-5		
1,1,2-Trichloroethane	79-00-5		
1,1-Dichloroethylene	75-35-4		
1,2-Dichloroethane	107-06-2		
1-ethylpyrrolidin-2-one (NEP)	2687-91-4		
Carbon Disulfide	75-15-0		
Ethylbenzene	100-41-4		
N,N-Dimethylacetamide (DMAC)	127-19-5		
N,N-Dimethylformamide (DMF)	68-12-2		
N-Methylpyrrolidone (NMP)	872-50-4		
Pentachloroethane	76-01-7		
Tetrachloroethene (Perchloroethylene)	127-18-4		
Tetrachloromethane	56-23-5		
Toluene	108-88-3		
Trichloroethylene (TCE)	79-01-6		
Trichloromethane (Chloroform)	67-66-3		

T. Others

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
p-Phenylenediamine	106-50-3	Usage Ban [TR=20]	ISO 14362-1 without cleavage
2-Phenyl-2-propanol	617-94-7	50	Extraction in acetone or methanol (sonication at 60°C for 30 min) + GC-MS
Acetophenone	98-86-2	50	
Quinoline	91-22-5	50	DIN 54231 with methanol extraction at 70°C

U. Packaging

In numerous jurisdictions where VF operates, VF must comply with various packaging requirements. All packages, packaging components and packaged retail-ready products supplied to VF Corporation or otherwise used in the delivery of VF Products shall be in compliance with the following packaging restrictions.

A signed RSL Compliance Agreement serves as the packaging supplier's certification and as the VF Product supplier's certification that associated packaging materials are in compliance with the VF packaging restrictions.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Cadmium (Cd)	7440-43-9	Usage Ban [TR=100; total sum].[38]	CEN/TR 13695-1
Lead (Pb)	7439-92-1		
Chromium, Hexavalent Cr(VI)	18540-29-9		
Mercury (Hg)	7439-97-6		
PVC	9002-86-2	Usage Ban	Beilstein Test for screening, FTIR for confirmation
Dimethyl fumarate (DMFu)	624-49-7	Usage Ban [TR=0.1]	ISO 16186
Phthalates, according to Section 2, Table O	Various	1,000	GAFTI Modified CPSC-CH-C1001-09.4
Perfluoroalkyl and polyfluoroalkyl substances (PFAS).[39]	Various	Usage Ban	ISO 23702-1
Mineral oil aromatic hydrocarbons (MOAH) consisting of 1 to 7 aromatic rings	Various	10,000[40]	HPLC-GC-FID
MOAH consisting of 3 to 7 aromatic rings	Various	1 from Jan 2025	
Mineral oil saturated hydrocarbons (MOSH) consisting of 16 to 35 carbon atoms	Various	1,000 from Jan 2025	

V. Electrical and Electronic Equipment

V1. RoHS

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Cadmium (Cd)	7440-43-9	100	IEC 62321
Chromium, Hexavalent Cr(VI)	18540-29-9	1,000	
Lead (Pb)	7439-92-1		
Mercury (Hg)	7439-97-6		
Polybrominated biphenyls (PBB)	59536-65-1		
Polybrominated diphenyl ethers (PBDE)	Various		
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7		
Butyl benzyl phthalate (BBP)	85-68-7		
Dibutyl phthalate (DBP)	84-74-2		
Di-iso-butyl phthalate (DIBP)	84-69-5		

[38] Intentional use prohibited; limit applies to incidental concentrations only.
[39] Including but not limited to the list in section 2N.
[40] Limit value will be 1,000 from January 2025

V2. Batteries

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Cadmium (Cd)	7440-43-9	20	IEC 62321
Lead	7439-92-1	40	
Mercury (Hg)	7439-97-6	5	

W. Food Contact Materials

All food contact products and materials supplied to VF must comply with food contact requirements in the countries where the VF products are sold or marketed. Suppliers of products and materials intended for food contact applications agree to comply with applicable food contact regulations (such as in the US, EU or China). The substances listed below represent additional restrictions.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Bisphenol A (BPA)	80-05-7	Usage Ban [TR=0.1]	Solvent extraction / LC-MS
PVC	9002-86-2	Usage Ban	Beilstein Test for screening, FTIR for confirmation
Vinyl chloride monomer	75-01-4	1	ISO 6401
Phthalates, according to Section 2, Table O	Various	Usage Ban [TR=500 each phthalate; 1,000 total sum phthalates]	GAFTI Modified CPSC-CH-C1001-09.4
Perfluoroalkyl and polyfluoroalkyl substances (PFAS).[41]	Various	Usage Ban	ISO 23702-1

X. Toys

All toys supplied to VF must comply with the toys requirements in the countries where the VF products are sold or marketed. Moreover, all limits and requirements listed in this section as well as in the other sections of the VF RSL apply entirely.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Aniline	62-53-3	30	**Textile:** ISO 14362-1 **Natural leather:** ISO 17234-1

[41] Including but not limited to the list in section 2N.

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Bisphenol A (BPA)	80-05-7	Usage Ban	EN 71-10 + EN 71-11
Formaldehyde	50-00-0	20 (textile, leather)[42]	**Textile:** ISO 14184-1 **Natural Leather:** ISO 17226-1
Formamide	75-12-7	200	Solvent extraction with GC-MS analysis
1,2-benzisothiazol- 3(2H)-one	2634-33-5	5	EN 71-10 + EN 71-11
Reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)	55965-84-9	1	EN 71-10 + LC-MS/MS
5-Chloro-2-methyl- isothiazolin-3(2H)- one	26172-55-4	0.75	EN 71-10 + LC-MS/MS
2-methylisothiazolin-3(2H)-one	2682-20-4	0.25	EN 71-10 + LC-MS/MS
Phenol	108-95-2	5 mg/l (migration limit) in polymeric materials 10 mg/kg (content limit) as a preservative	EN 71-10 + EN 71-11
Perfluoroalkyl and polyfluoroalkyl substances (PFAS).[43]	Various	Usage Ban	ISO 23702-1
Phthalates, according to Section 2, Table O	Various	Usage Ban [TR=500 each phthalate; 1,000 total sum phthalates]	GAFTI Modified CPSC-CH-C1001-09.4
PVC	9002-86-2	Usage Ban	Beilstein Test for screening, FTIR for confirmation
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	5	Solvent extraction/ GC-MS or LC-MS
Tris(1-chloro-2-propyl) phosphate (TCPP)	13674-84-5	5	
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8	5	
Vinyl chloride monomer	75-01-4	1	ISO 6401
Metals and elements	Various	According to toy category	EN 71-3

[42] For other materials, reach your VF brand-specific product safety team (Appendix 1).
[43] Including but not limited to the list in section 2N.

Y. Phase-Out and Unintentionally Present Substances

Y1. Phase-Out of Polyvinyl Chloride (PVC)

VF prohibits PVC use in all newly developed products.

At this time, PVC use may be continued in limited legacy product lines. Exceptions may be provided by the VF Product Stewardship department for critical uses.

Y2. Phase-Out of PFAS

VF and our brands are actively working to meet our commitment to eliminate unwanted chemistries by 2025, including PFAS, from our products. Should PFAS regulatory restrictions become applicable to our products, VF products will comply with all such requirements at the time applicable to our business.

Currently, approximately ninety-five percent (95%) of all VF brand products do not contain any PFAS-based chemistry. PFAS-based chemistries are currently used on only a limited number of our products and only so that those products can meet customer expectations regarding performance in extreme conditions and/ or workwear requirements. All use of PFAS-based chemistries meet regulatory requirements in each jurisdiction where such product is offered for sale.

Section 3 Substances Which are Not Likely Found in Products

A. Dioxins and Furans

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Group 1			
2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	1746-01-6	Unavoidable traces acceptable up to 1 µg/kg for Group 1	U.S. EPA Method 8290
1,2,3,7,8-Pentachloro-dibenzo-*p*-dioxin	40321-76-4		
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9		
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4		
Group 2			
1,2,3,4,7,8-Hexachloro-dibenzo-*p*-dioxin	39227-28-6	Unavoidable traces acceptable up to 5 µg/kg for sum of Groups 1 & 2	U.S. EPA Method 8290
1,2,3,7,8,9-Hexachloro-dibenzo-*p*-dioxin	19408-74-3		
1,2,3,6,7,8-Hexachloro-dibenzo-*p*-dioxin	57653-85-7		
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6		
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9		
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9		
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9		
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5		
Group 3			
1,2,3,4,6,7,8-Heptachloro-dibenzo-*p*-dioxin	35822-46-9	Unavoidable traces acceptable up to 100 µg/kg for sum of Groups 1, 2, and 3	U.S. EPA Method 8290
1,2,3,4,6,7,8,9-Octachlorodibenzo-*p*-dioxin	3268-87-9		
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7		
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0		
Group 4			
2,3,7,8-Tetrabromodibenzo-*p*-dioxin	50585-41-6	Unavoidable traces acceptable up to 1 µg/kg for Group 4	U.S. EPA Method 8290
1,2,3,7,8-Pentabromo-dibenzo-*p*-dioxin	109333-34-8		
2,3,7,8-Tetrabromodibenzofuran	67933-57-7		
2,3,4,7,8-Pentabromodibenzofuran	131166-92-2		
Group 5			
1,2,3,4,7,8-Hexabromo-dibenzo-*p*-dioxin	110999-44-5	Unavoidable traces acceptable up to 5 µg/kg for sum of Groups 4 & 5	U.S. EPA Method 8290
1,2,3,7,8,9-Hexabromo-dibenzo-*p*-dioxin	110999-46-7		
1,2,3,6,7,8-Hexabromo-dibenzo-*p*-dioxin	110999-45-6		
1,2,3,7,8-Pentabromodibenzofuran	107555-93-1		

B. Asbestos

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
All asbestos fibres, including, but not limited to:		Usage Ban	U.S. EPA/600/R-93/116
Actinolite	77536-66-4		
Amosite	12172-73-5		
Anthophyllite	77536-67-5		
Chrysotile	12001-29-5 132207-32-0		
Crocidolite	12001-28-4		
Tremolite	77536-68-6		

C. Pesticides

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Aldicarb	116-06-3	Not Detected	U.S. EPA Methods: 8081B / 8151A / 8141B [RL=0.5]
Aldrin	309-00-2		
Azinophosmethyl	86-50-0		
Azinophosethyl	2642-71-9		
Bromophos-ethyl	4824-78-6		
Captafol	2425-06-1		
Carbaryl	63-25-2		
Chlordane	57-74-9		
Chlordimeform	6164-98-3		
Chlorfenvinphos	470-90-6		
Chlorobenzilate	510-15-6		
Chlorothalonil	1897-45-6		
Coumaphos	56-72-4		
Cyfluthrin	68359-37-5		
Cyhalothrin	91465-08-6		
Cypermethrin	52315-07-8		
DEF	78-48-8		
Deltamethrin	52918-63-5		
1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8		
p,p-Dichlorodiphenyl-dichloroethane (*p,p*-DDD)	72-54-8		
o,p-Dichlorodiphenyl-dichloroethane (*o,p*-DDD)	53-19-0		
p,p-Dichlorodiphenyl-dichloroethylene (*p,p*-DDE)	72-55-9		
o,p-Dichlorodiphenyl-dichloroethylene (*o,p*-DDE)	3424-82-6		
p,p-Dichlorodiphenyl-trichloroethane (*p,p*-DDT)	50-29-3		
o,p-Dichlorodiphenyl-trichloroethane (*o,p*-DDT)	789-02-6		
2,4-Dichlorophenoxy-acetic acid, its salts and compounds (2,4-D)	94-75-7		
5,7-dichloro-4-(2,4,5-trichlorophenoxy)-2-(trifluoromethyl)-1H-benzimidazole	63405-99-2		
Diazinon	333-41-5		
Dichlofluanid	1085-98-9		
Dichlorprop	120-36-5		

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Dicrotophos	141-66-2		
Dicofol	115-32-2		
o,p'-Dicofol	10606-46-9		
Dieldrin	60-57-1		
Dimethoate	60-51-5		
Dinoseb and salts	88-85-7		
Endosulfan , including alpha (959-98-8) and beta (33213-65-9)	115-29-7		
Endrin	72-20-8		
Ethylene Dibromide (EDB)	106-93-4		
Esfenvalerate	66230-04-4		
Fenvalerate	51630-58-1		
Hexachlorobenzene	118-74-1		
Hexachlorocyclohexane (HCH), all isomers.[44]	608-73-1		
Heptachlor	76-44-8		
Heptachlor epoxide	1024-57-3		
Isodrin	465-73-6		
Kelevan	4234-79-1		
Kepone (Chlorodecone)	143-50-0		
Malathion	121-75-5		
MCPA	94-74-6		
MCPB	94-81-5		
Mecoprop	93-65-2 7085-19-0		
Metamidophos	10265-92-6		
Methoxychlor	72-43-5		
Methyl Parathion	298-00-0		
Mirex	2385-85-5		
Monocrotophos	6923-22-4		
Paraquat	1910-42-5		
Parathion	56-38-2		
Pentachloroanisole	1825-21-4		
Perthane	72-56-0		
Phosdrin/Mevinphos	7786-34-7		
Propethamphos	31218-83-4		
Profenophos	41198-08-7		
Quinalphos	13593-03-8		
Quintozene	82-68-8		
Strobane	8001-50-1		
Telodrin	297-78-9		
Timiperone	57648-21-2		
Tolylfluanid	731-27-1		
Toxaphene	8001-35-2		
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T), salts, compounds	93-76-5		
2-(2,4,5-Trichlorophenoxy) propionic acid, salts, compounds	93-72-1		
Trifluralin	1582-09-8		

[44] All isomers of HCH, including alpha (319-84-6), beta (319-85-7), delta (319-86-8), epsilon (6108-10-7), and gamma (lindane, 58-89-9).

D. Other Organic Chemicals

Chemical Substance	CAS Number	Limit Value Final Product (mg/kg)	Test Method
Halogenated biphenyls, including: • Polychlorinated biphenyl (PCB)	Various 1336-36-3 53469-21-9 included,	Usage Ban [TR=1]	Solvent extraction / GC-MS
Halogenated diarylalkanes	Various		
Halogenated naphthalenes	Various, 70776-03-3 included		
Halogenated terphenyls, including: • Polychlorinated terphenyl (PCT)	Various		
Halogenated diphenyl methanes, including: • Monomethyl-dibromo-diphenyl methane.[45] • Monomethyl-dichloro-diphenyl methane.[46] • Monomethyl-tetrachloro-diphenyl methane.[47]	 99688-47-8 81161-70-8 76253-60-6		
Hexachlorobutadiene	87-68-3		

Section 4 Air and Gas Filled Products

Fluorinated greenhouse gases and ozone depleting substances are prohibited from use in the air space in all products. They must not be detectable when tested by GC-MS at a detection level of 0.1 mg/kg.

A. Fluorinated greenhouse gases[48]

Chemical Substance	CAS Number		Chemical Substance	CAS Number
Sulfur hexafluoride - SF_6	2551-62-4		HFC-236ea - CHF_2CHFCF_3	431-63-0
Hydrofluorocarbons (HFCs):			HFC-236fa - $CF_3CH_2CF_3$	690-39-1
HFC-23 - CHF_3	75-46-7		HFC-245ca - $CH_2FCF_2CHF_2$	679-86-7
HFC-32 - CH_2F_2	75-10-5		HFC-245fa - $CHF_2CH_2CF_3$	460-73-1
HFC-41 - CH_3F	593-53-3		HFC-365 mfc - $CF_3CH_2CF_2CH_3$	406-58-6
HFC-125 - CHF_2CF_3	354-33-6		HFC-43-10 mee - $CF_3CHFCHFCF_2CF_3$	138495-42-8
HFC-134 - CHF_2CHF_2	359-35-3			
HFC-134a - CH_2FCF_3	811-97-2		**Perfluorocarbons (PFCs):**	
HFC-143 - CH_2FCHF_2	420-46-2		Perfluoromethane - CF_4	75-73-0
HFC-143a - CH_3CF_3	470-46-6		Perfluoroethane - C_2F_6	76-16-4
HFC-152 - CH_2FCH_2F	624-72-6		Perfluoropropane - C_3F_8	76-19-7
HFC-152a - CH_3CHF_2	75-37-6		Perfluorobutane - C_4F_{10}	355-25-9
HFC-161 - CH_3CH_2F	353-36-6		Perfluoropentane - C_5F_{12}	678-26-2
HFC-227ea - CF_3CHFCF_3	431-89-0		Perfluorohexane - C_6F_{14}	355-42-0
HFC-236cb - $CH_2FCF_2CF_3$	677-56-5		Perfluorocyclobutane - c-C_4F_8	115-25-3

[45] Also DBBT.
[46] Also Ugilec 121 or Ugilec 21.
[47] Also Ugilec 141.
[48] As listed in Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases.

B. Class I Ozone depleting substances [49]

B1. Group I:

Chemical Substance	CAS Number		Chemical Substance	CAS Number		Chemical Substance	CAS Number
$CFCl_3$	75-69-4		$C_2F_3Cl_3$	76-13-1		C_2F_5Cl	76-15-3
CF_2Cl_2	75-71-8		$C_2F_4Cl_2$	76-14-2			

B2. Group II:

Chemical Substance	CAS Number		Chemical Substance	CAS Number		Chemical Substance	CAS Number
CF_2ClBr	353-59-3		CF_3Br	75-63-8		$C_2F_4Br_2$	124-73-2

B3. Group III:

Chemical Substance	CAS Number		Chemical Substance	CAS Number		Chemical Substance	CAS Number
CF_3Cl	75-72-9		$C_3F_2Cl_6$	3182-26-1		$C_3F_6Cl_2$	661-97-2
C_2FCl_5	354-56-3		$C_3F_3Cl_5$	2354-06-5		C_3F_7Cl	422-86-6
$C_2F_2Cl_4$	76-12-0		$C_3F_4Cl_4$	29255-31-0			
C_3FCl_7	422-78-6		$C_3F_5Cl_3$	4259-43-2			

B4. Group IV:

Chemical Substance	CAS Number
CCl_4	56-23-5

B5. Group V:

Chemical Substance	CAS Number
$C_2H_3Cl_3$	71-55-6

B6. Group VI:

Chemical Substance	CAS Number
CH_3Br	74-83-9

B7. Group VII:

Chemical Substance		Chemical Substance		Chemical Substance		Chemical Substance		Chemical Substance
$CHFBr_2$		$C_2H_2FBr_3$		$C_3HF_2Br_5$		$C_3H_2F_4Br_2$		$C_3H_4F_2Br_2$
CHF_2Br		$C_2H_2F_2Br_2$		$C_3HF_3Br_4$		$C_3H_2F_5Br$		$C_3H_4F_3Br$
CH_2FBr		$C_2H_2F_3Br$		$C_3HF_4Br_3$		$C_3H_3FBr_4$		$C_3H_5FBr_2$
C_2HFBr_4		$C_2H_3FBr_2$		$C_3HF_5Br_2$		$C_3H_3F_2Br_3$		$C_3H_5F_2Br$
$C_2HF_2Br_3$		$C_2H_3F_2Br$		C_3HF_6Br		$C_3H_3F_3Br_2$		C_3H_6FBr
$C_2HF_3Br_2$		C_2H_4FBr		$C_3H_2F_2Br_4$		$C_3H_3F_4Br$		
C_2HF_4Br		C_3HFBr_6		$C_3H_2F_3Br_3$		$C_3H_4FBr_3$		

[49] https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances - classification U.S. Environmental Protection Agency.

B8. Group VIII:

Chemical Substance	CAS Number
CH_2BrCl	74-97-5

C. Class II Ozone depleting substances

Chemical Substance	CAS Number		Chemical Substance	CAS Number		Chemical Substance	CAS Number
$CHFCl_2$	75-43-4		C_3HFCl_6	422-26-4		$C_3H_3FCl_4$	666-27-3
CHF_2Cl	75-45-6		$C_3HF_2Cl_5$	422-49-1		$C_3H_3F_2Cl_3$	460-63-9
CH_2FCl	593-70-4		$C_3HF_3Cl_4$	422-52-6		$C_3H_3F_3Cl_2$	460-69-5
C_2HFCl_4	354-14-3		$C_3HF_4Cl_3$	422-54-8		$C_3H_3F_4Cl$	134190-50-4
$C_2HF_2Cl_3$	354-21-2		$C_3HF_5Cl_2$	422-56-0		$C_3H_4FCl_3$	421-41-0
$C_2HF_3Cl_2$	306-83-2		$C_3HF_5Cl_2$	507-55-1		$C_3H_4F_2Cl_2$	819-00-1
C_2HF_4Cl	2837-89-0		C_3HF_6Cl	431-87-8		$C_3H_4F_3Cl$	460-35-5
$C_2H_2FCl_3$	359-28-4		$C_3H_2FCl_5$	421-94-3		$C_3H_5FCl_2$	420-97-3
$C_2H_2F_2Cl_2$	1649-08-7		$C_3H_2F_2Cl_4$	460-89-9		$C_3H_5F_2Cl$	421-02-3
$C_2H_2F_3Cl$	75-88-7		$C_3H_2F_3Cl_3$	7125-84-0		C_3H_6FCl	430-55-7
$C_2H_3FCl_2$	1717-00-6		$C_3H_2F_4Cl_2$	425-94-5			
$C_2H_3F_2Cl$	75-68-3		$C_3H_2F_5Cl$	460-92-4			

Section 5 Liquid Filled Products

Products containing any liquid, gel or other liquid-type substance must meet the following restrictions:

1. Hazardous liquids shall not be used as the filling liquid in any liquid filled product. Hazardous liquids are those which are classified as toxic (acute or chronic), carcinogenic, reproductive toxic, flammable, explosive, irritants or sensitizers.

2. Bacteria growth must not occur. The following limits apply to the liquid of all liquid filled products.

Bacteria	Limit Value
Staphylococcus aureus	No contamination (<500 CFU/g or CFU/ml)
Escherichia coli (E-coli)	
Pseudomonas aeruginosa	
Salmonella	
All other bacteria	1,000 CFU/g or CFU/ml (total)

Section 6 REACH–EU's Regulation Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

A. REACH–European Regulation No 1907/2006

REACH is the comprehensive regulatory framework for chemicals (including consumer products) in the European Union (EU). It is intended to improve consumer safety and environmental protection while enhancing competitiveness, by improving knowledge and transparency along the value chains that involve chemicals.

REACH is regulated by the EU Regulation No 1907/2006. It is a European law applying to individuals, particular authorities and companies. In spite of what many people think, REACH does not only apply on Substances, but also on Preparations and on Articles.

- **Substances** are defined as pure chemicals.
- **Preparations** are defined as mixtures of substances.
- **Articles** are defined by their geometrical form rather than the chemical/ physical properties of the substance**.**

There are specific provisions in REACH related to:

- **Substances** in Articles.
- **Intended Release** of Substances contained in Article.

The Basic Principle of REACH is that all chemical substances – pure, in preparations and/or in articles – are treated the same way. Import, usage and selling in Europe are only allowed for those substances for which adequate chemical information is available. **"No data, No Market!"**

B. Ownership and Key Elements of REACH

The central part of the REACH administration is the European Chemical Agency (ECHA) located in Helsinki, Finland. The ECHA manages the **R**egistration, **E**valuation, **A**uthorisation and the Restriction of the **CH**emical substances.

- **Registration** = any new substance placed on the EU market in excess of 1 ton/year.
- **Evaluation** = review of information submitted in the dossier of each registered substance.

Authorisation or Restriction procedures will be applied by the ECHA on those substances that are found to be particularly hazardous.

- **Authorisation =** allowing hazardous substances in strictly defined applications only. Outside the Registration process, EU member states may suggest candidate **S**ubstances of **V**ery **H**igh **C**oncern (SVHC) for authorisation or restriction by the ECHA (see also REACH Annex XIV and the Candidate SVHC list).
- **Restriction of Chemicals** = substances that are banned from their use in certain applications or restricted, having maximum limits (see also REACH Annex XVII).

C. Obligations under REACH

A company's obligations under REACH depend strongly on its role in the value chain and its particular business setup. There are 4 basic roles, each having its own obligations.

Manufacturers or Importers of Chemicals are only allowed to market (pre-) registered substances in the EU. They must register any substances with the ECHA, as soon as they pass the 1 ton/year limit. They also have an information duty to their downstream users and customers. This involves providing them essential safety information under the

form of completed Safety Data Sheets (SDS), applying CLP's practices and when applicable, communicating any content of SVHC above the 0.1% (w/w) in their chemicals.

Formulators of Chemicals, mixing substances to be marketed in the EU, need to make sure that every single one of the substances used are (pre-) registered with the ECHA by the Manufacturers or Importers. They are required to take adequate precautions when handling hazardous substances, to keep all the SDS updated and current and when their preparations do contain SVHC or candidate SVHC in a concentration above 0.1% (w/w), they also have an information duty towards their business customers, without being asked.

Manufacturers or Importers of Articles, Brands have the duty to inform their business customers in the EU if their articles contain (candidate) SVHC in levels above 0.1% (w/w). They are obliged to do this without being asked for such information. Towards the ECHA, there is an additional notification duty in those cases where those SVHC would exceed the value of 1 ton/year, via that particular article import. Towards individual end consumers, there is an obligation to respond within 45 days to questions on the presence of SVHC above the 0.1% (w/w) threshold level.

Retailers are also required to respond within 45 days to all questions from individual consumers on the presence of SVHC above the 0.1% (w/w) threshold value when being asked. If your supplier informed you that some of their products do contain more than 0.1% SVHC, you may also need to pass on the adequate safety information to the end consumer upon request.

The information above is by no means exhaustive, and does not replace official or professional advice on this matter. More information on the above can be found on the regulation's section of the ECHA's website (https://echa.europa.eu/home).

D. Substances of Very High Concern

Substances of Very High Concern (SVHC) are the most hazardous substances according to REACH. Article 57 of REACH states their criteria. All SVHC are proposed by either the European Commission or the EU Member states. The SVHC list is called the Candidate list, because from the moment onwards a substance is listed, it becomes a candidate for Authorisation.

Of particular note for REACH is the speed at which new substances may become listed as a SVHC. To ensure all products supplied to VF comply with REACH at the time of market, each supplier is obligated to track and monitor all SVHC in their supply chain and to keep up to date with official candidate list on the ECHA's website (http://echa.europa.eu/web/guest/candidate-list-table), where all regular updates are posted.

Suppliers shall map each step in their supply chains, including the sourcing and processing of raw materials, parts, chemicals and other product ingredients, in order to be able to immediately inform VF of all cases where a substance listed in the candidate list is present in the article at or above a 0.1% concentration, by weight.

The VF Focus List highlights those SVHC from the official candidate lists that are not directly covered under Section 1 of the VF RSL and that are known to be used in textile applications and/or being linked – directly or indirectly - to the textile chemical industry. This list is intended to be an additional guideline for our suppliers and contractors, helping them to focus on those parts of their supply chains where some SVHC could possibly be encountered and where appropriate testing protocols could be relevant. The reduced number of SVHC in the focus list, do not exempt by any means the supply chain tracking and monitoring requirements needed for all not mentioned SVHC.

D1. VF Focus List

Nr.[50]	Chemical substance	CAS Number	Textile Application
28/10/2008.[51] - *15 SVHC published / Total sum to date = 15*			
1	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	Residue polyurethane production
2	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	Synthetic musk
3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	Flame retardant, plasticizers, fat-liquoring agents
4	Anthracene	120-12-7	PAH in mineral oil
5	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	Plasticizer
6	Bis(tributyltin) oxide (TBTO)	56-35-9	Biocide (fungicide), Preservative
7	Butyl benzyl phthalate (BBP)	85-68-7	Plasticizer
8	Diarsenic pentaoxide	1303-28-2	In dyes
9	Dibutyl phthalate (DBP)	84-74-2	Plasticizer
10	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified	25637-99-4 3194-55-6	Flame retardant
11	Sodium dichromate	7789-12-0 10588-01-9	Dye for leather
13/01/2010 – *11 SVHC published / Total sum to date = 26*			
16	2,4-Dinitrotoluene	121-14-2	Intermediates in the manufacture of dyestuffs, manufacture of azo-dyes and PU foam
17	Di-iso-butyl phthalate (DIBP)	84-69-5	Plasticizer
18	Lead chromate	7758-97-6	Manufacture of pigments and dyes
19	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	Textile printing, textile pigments in coatings
20	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	Textile printing, textile pigments in coatings
21	Pitch, coal tar, high temp.	65996-93-2	Dyestuff synthesis
22	Tris(2-chloroethyl)phosphate	115-96-8	Flame retardant and plasticizer. Used in rigid and flexible polyurethane and polyisocyanurate foams, carpet backing, flame laminated and rebonded flexible foam, flame retardant coatings, most classes of thermosets and adhesives
30/03/2010 – *1 SVHC published / Total sum to date = 27*			
27	Acrylamide	79-06-1	Monomer residue polyacrylamide
18/06/2010 – *8 SVHC published / Total sum to date = 35*			
28	Ammonium dichromate	7789-09-5	Dyeing of protein fibres, dyeing with chrome dyes
29	Boric acid	10043-35-3 11113-50-1	Preservatives for textile, flame retardants, liquid laundry products, detergents, cleaners, stain removers, other decontamination agents

[50] Internal reference number to the official SVHC list.
[51] The inclusion date of the SVHC publication in the official candidate list on the ECHA's website.

Nr.[50]	Chemical substance	CAS Number	Textile Application
30	Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	Detergents, precursor perborate, stabilizer enzymes with liquid/laundry detergents
31	Potassium chromate	7789-00-6	Dyeing of protein fibres, dyeing with chrome dyes, pigments
32	Potassium dichromate	7778-50-9	Dyeing of protein fibres, dyeing with chrome dyes, mordants
33	Sodium chromate	7775-11-3	Dyeing of protein fibres, dyeing with chrome dyes
34	Tetraboron disodium heptaoxide, hydrate	12267-73-1	Detergents, precursor perborate, stabilizer enzymes with liquid/laundry detergents
35	Trichloroethylene	79-01-6	Degrease wool, textile desizing, scouring
15/12/2010 – *8 SVHC published / Total sum to date = 43*			
36	2-Ethoxyethanol	110-80-5	Minor uses: solvents
37	2-Methoxyethanol	109-86-4	Catalysts, minor uses: pigments, dyes and rubber adhesion
38	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	Minor uses: pigments, catalyst and oxidizing agent
39	Chromium trioxide	1333-82-0	Minor uses as pigment, catalyst and oxidizing agent
40	Cobalt(II) carbonate	513-79-1	Catalyst
41	Cobalt(II) diacetate	71-48-7	Pigments
42	Cobalt(II) dinitrate	10141-05-6	Catalyst
43	Cobalt(II) sulphate	10124-43-3	Pigments and possibly catalysts, desiccants
20/06/2011 – *7 SVHC published / Total sum to date = 50*			
44	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	Plasticizer
45	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	Plasticizer
46	1-Methyl-2-pyrrolidone	872-50-4	Coatings: acrylic and styrene latexes, urethane dispersions
47	Hydrazine	302-01-2 7803-57-8	Corrosion inhibitor in water treatment
20/06/2011 - 28/10/2008 – *1 SVHC published / Total sum to date = 51*			
51	Cobalt dichloride	7646-79-9	Desiccants
19/12/2011 – *20 SVHC published / Total sum to date = 71*			
52	1,2-dichloroethane	107-06-2	Vinyl chloride monomer (PVC-products)
53	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	Curing agent in the production of PU resins and PU elastomers (end product can contain up to 4% MOCA)
54	2-Methoxyaniline; o-Anisidine	90-04-0	Dyestuff for leather-, textile- and paper products, pigment in printing inks
55	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	Emulsifier in textile finishing agents, emulsifier in washing agents, textile printing inks

Nr.[50]	Chemical substance	CAS Number	Textile Application
56	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI of Regulation (EC) No 1272/2008	-	Materials for PPE, applied in carpet backing
57	Bis(2-methoxyethyl) phthalate	117-82-8	Plasticizer PVC, printing inks
58	N,N-dimethylacetamide	127-19-5	Spinning solvent acrylic -, polyurethane-, polyurea co polymers and meta-aramide fibres (fibres can contain up to 3% DMAC)
59	Pentazinc chromate octahydroxide	49663-84-5	C.I. Pigment yellow 36
60	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	C.I. Pigment yellow 36:1
18/06/2012 – *13 SVHC published / Total sum to date = 84*			
74	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	C.I. Basic Blue 26, printing inks, dyes
75	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	C.I. Basic Violet 3, printing inks, dyes
76	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	Solvent Violet 8, writing inks, dyes
77	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	Solvent blue 4 dye, printing inks and adhesives
78	Diboron trioxide	1303-86-2	Flame retardant, detergent and cleaning, biocide
79	Formamide	75-12-7	Plasticiser, water soluble glues
80	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	C.I. Basic Violet 3, printing inks
19/12/2012 – *54 SVHC published / Total sum to date = 138*			
85	1,2-diethoxyethane	629-14-1	Intermediate
86	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	Moisture scavenger for use in urethane coatings, sealing and elastomers
87	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	Surface active substance, detergents. Additive in some spinning oils
88	4-Aminoazobenzene	60-09-3	Aromatic amines, azo-dyes
89	4-Nonylphenol, branched and linear	-	Surface active substance, detergents. Additive in some spinning oils
90	6-methoxy-m-toluidine (p-cresidine)	120-71-8	Aromatic amines, azo-dyes
91	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	Leather
92	Dibutyltin dichloride (DBTC)	683-18-1	Additive in rubber, PVC stabilizer, catalyst PU production
93	Diethyl sulphate	64-67-5	Ethylating agent, intermediate
94	Di-iso-pentyl phthalate (DIPP)	605-50-5	Phthalates/Plasticizers
95	Methoxyacetic acid	625-45-6	Intermediate

Nr.[50]	Chemical substance	CAS Number	Textile Application
96	N,N-Dimethylformamide	68-12-2	Solvent for PU-coating, PU- and acrylic fibre, artificial leather
97	N-pentyl-iso-pentyl phthalate (NPIPP)	776297-69-9	Phthalates/Plasticizers
98	o-Toluidine	95-53-4	Aromatic amines, azo-dyes
99	Pyrochlore, antimony lead yellow	8012-00-8	Pigment yellow 41 (pigment for inks and toners, coatings)
20/06/2013 – *6 SVHC published / Total sum to date = 144*			
139	4-Nonylphenol, branched and linear, ethoxylated	-	Detergent, paints, lacquers and varnishes, used in leather and textile processing
140	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	Production of fluoropolymers and fluoroelastomers
141	Cadmium	7440-43-9	Anti-corrosive coating, pigments, stabilizers for plastics and polymers, alloy surface treatment
142	Cadmium oxide	1306-19-0	Anti-corrosive coating, pigments, stabilizers for plastics and polymers
143	Dipentyl phthalate	131-18-0	Plasticizer
143	Pentadecafluorooctanoic acid (PFOA)	335-67-1	Production of fluoropolymers and fluoroelastomers
16/12/2013 – *7 SVHC published / Total sum to date = 151*			
139	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	Colorants & pigments, C.I Direct Black 38
140	Di-n-hexyl phthalate (DnHP or DHEXP)	84-75-3	Plasticiser
141	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	Accelerator for latex production (alkylthiourea)
150	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	Colorants & pigments, C.I Direct Red 28
16/06/2014 – *4 SVHC published / Total sum to date = 155*			
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	Phthalates/Plasticizers
17/12/2014 – *6 SVHC published / Total sum to date = 161*			
156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	UV stabilizer for synthetic materials, rubber and polyurethanes
157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	UV stabilizer for synthetic materials, rubber and polyurethanes
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	Heat stabilizer in PVC
159	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)	-	Heat stabilizer in PVC

Nr.[50]	Chemical substance	CAS Number	Textile Application
15/06/2015 – *2 SVHC published / Total sum to date = 163*			
163	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	68515-51-5 68648-93-1	Plasticizers, lubricants, coatings, polymer foils and adhesives
17/12/2015 – *5 SVHC published / Total sum to date = 168*			
164	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	UV-protection agents in coatings, plastics, rubber
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	UV-protection agents in coatings, plastics, rubber and cosmetics
166	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1, 21049-39-8, 4149-60-4	Cleaning agent/textile antifouling finishing agent/polishing surfactant
20/06/2016 – *1 SVHC published / Total sum to date = 169*			
169	Benzo[def]Chrysene (Benzo[a]Pyrene)	50-32-8	Impurity in carbon black, which on its turn is used as additive in rubber, coatings and plastics.
12/01/2017 – *4 SVHC published / Total sum to date = 173*			
170	4,4'-isopropylidenediphenol (Bisphenol A, BPA)	80-05-7	Polycarbonate epoxy resins and chemicals; hardener in epoxy resins
171	4-heptylphenol, branched and linear	-	Polymers; formulation into lubricants
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3830-45-3, 335-76-2, 3108-42-7	Lubricant, wetting agent, plasticizer and corrosion inhibitor
173	p-(1,1-dimethylpropyl)phenol	80-46-6	Chemicals and plastic products
07/07/2017 – *1 SVHC published / Total sum to date = 174*			
174	Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	355-46-4 et al.	Plasticiser, lubricant, surfactant, wetting agent, corrosion inhibitor and in fire-fighting foams.
15/01/2018 – *7 SVHC published / Total sum to date = 181*			
175	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"TM) [covering any of its individual anti- and syn-isomers or any combinationthereof]	-	Non-plasticising flame retardant, adhesives and sealants and binding agents.
176	Benz[a]anthracene	56-55-3	Plastics
178	Cadmium hydroxide	21041-95-2	Electrical, electronic and optical equipment.
180	Chrysene	218-01-9	Plastics
27/06/2018 – *10 SVHC published / Total sum to date = 191*			
182	Benzene-1,2,4-tricarboxylic acid; 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	Manufacture of esters and polymers.
183	Benzo[ghi]perylene	191-24-2	Plastics

Nr.[50]	Chemical substance	CAS Number	Textile Application
184	Decamethylcyclopentasiloxane (D5)	541-02-6	Washing and cleaning products, polishes and waxes, textile treatment products and dyes.
185	Dicyclohexyl phthalate (DCHP)	84-61-7	Phthalates/Plasticizers. Dispersing agent for formulations of organic peroxides
186	Disodium octaborate	12008-41-2	Lubricants, greases, and washing and cleaning products.
187	Dodecamethylcyclohexasiloxane (D6)	540-97-6	Washing and cleaning products, polishes and waxes.
188	Ethylenediamine (EDA)	107-15-3	Adhesives and sealants, coating products, fillers, putties, plasters, modelling clay, pH regulators and water treatment products.
189	Lead	7439-92-1	Metals, metal surface treatment products and polymers.
190	Octamethylcyclotetrasiloxane (D4)	556-67-2	Washing and cleaning products, polishes and waxes.
191	Terphenyl hydrogenated	61788-32-7	Plastic additive, solvent, in coatings/inks, in adhesives and sealants, and heat transfer fluids.
15/01/2019 – *6 SVHC published / Total sum to date = 197*			
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	Polymers, thermal paper, surface coatings, inks and adhesives
193	Benzo[k]fluoranthene	207-08-9	Coatings, adhesives and cleaning agents
194	Fluoranthene	206-44-0	Coatings, adhesives and cleaning agents
195	Phenanthrene	85-01-8	Coatings, adhesives and cleaning agents
196	Pyrene	129-00-0	Coatings, adhesives and cleaning agents
16/07/2019 – *4 SVHC published / Total sum to date = 201*			
198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propanoic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	Processing aid in the production of fluorinated polymers
199	2-methoxyethyl acetate	110-49-6	Solvent for gums, resins, waxes, oils and textile printing
200	4-tert-butylphenol	98-54-4	Coating products, polymers, adhesives, sealants
201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	Stabilizer in rubbers and plastic products
16/01/2020 – *4 SVHC published / Total sum to date = 205*			

Nr.[50]	Chemical substance	CAS Number	Textile Application
202	Perfluorobutane sulfonic acid (PFBS) and its salts	375-73-5 et al.	Catalyst/ additive/reactant in polymer manufacture and in chemical synthesis. It is also used as a flame retardant in polycarbonate
203	Di-iso-hexyl phthalate	71850-09-4	Plasticizer
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Polymer production
205	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Polymer production
25/06/2020 – *4 SVHC published / Total sum to date = 209*			
206	1-vinylimidazole	1072-63-5	Polymer production
207	2-methylimidazole	693-98-1	Catalyst in the production of coating products
208	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	Catalyst and as an additive in the production of plastics
209	Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	Cosmetics, personal care products and pharmaceuticals
19/01/2021 – *2 SVHC published / Total sum to date = 211*			
210	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	Additive for the fixation of resins in durable-press cotton and cellulosic fabrics
211	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	-	Stabilizers and catalysts in plastics and rubber
08/07/2021 – *8 SVHC published / Total sum to date = 219*			
212	2-(4-tertbutylbenzyl) propionaldehyde and its individual stereoisomers	-	Cleaning agents, scented articles, polishes and wax blends
213	Orthoboric acid, sodium salt	13840-56-7	Solvent and corrosion inhibitor
214	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	Manufacture of polymer resins, foams. Flame retardants
215	Glutaral	111-30-8	Biocide for leather tanning,
216	Medium-chain chlorinated paraffins (MCCP)	85535-85-9	Flame retardants, secondary plasticising additives in plastics, sealants, rubber and textiles
217	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	Preparation of lubricant additive materials and of fuel system cleaners
218	1,4-dioxane	123-91-1	Solvent
219	4,4'-(1-methylpropylidene)bisphenol (Bisphenol B)	77-40-7	Manufacture of phenolic and polycarbonate resin
17/01/2022 – *4 SVHC published / Total sum to date = 223*			
220	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	Rubbers, plastics, sealants

Nr.[50]	Chemical substance	CAS Number	Textile Application
221	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	Rubbers, lubricants, adhesives, inks, fuels
223	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	Lubricants, greases
10/06/2022 – *1 SVHC published / Total sum to date = 224*			
224	N-(hydroxymethyl)acrylamide	924-42-5	Plastics, paints and coating
17/01/2023 – *9 SVHC published / Total sum to date = 233*			
225	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]	37853-59-1	Flame retardant
226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	Flame retardant
227	4,4'-sulphonyldiphenol (BPS)	80-09-1	Paper products, textile, leather or fur and chemicals
228	Barium diboron tetraoxide	13701-59-2	Paints and coatings
229	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	Flame retardant and plasticiser
230	Isobutyl 4-hydroxybenzoate	4247-02-3	Coatings
231	Melamine	108-78-1	Polymers and resins, coating products, adhesives and sealants, leather treatment products
232	Perfluoroheptanoic acid and its salts	-	Production of fluoropolymers and fluoroelastomers

E. Useful links

Pre-candidate list
be aware of the substances for which an SVHC dossier is planned to be submitted to ECHA with the "Registry of SVHC intentions until outcome"
https://echa.europa.eu/registry-of-svhc-intentions

SVHC or Candidate list
chemicals for which the Reach 0,1 % w/w threshold applies
https://echa.europa.eu/candidate-list-table

Authorisation List
List of substances included in Annex XIV
https://echa.europa.eu/authorisation-list

Annex XVII list
includes all the restrictions adopted in the framework of REACH
https://echa.europa.eu/substances-restricted-under-reach

Section 7 Biocides

Biocides are chemical substances that are used to suppress or control biological organisms such as mould and bacteria. Products are typically treated with biocides to preserve the product itself or to create a function such as odour control or insect repellency.

An article that has been treated[52] with or intentionally incorporates a biocidal product, with a view to protect its properties or function or extend its durability or shelf life is **an article having a Biocidal Property**. *(i.e. leather goods treated with fungicides to prevent mould or mildew or carpets treated with insecticides against moth damage)*

An article treated with a biocidal product, with the intention not to protect the article itself or its function, but to introduce an additional function which is biocidal, is considered to be **an article with a Primary Biocidal Function**. *(i.e. an insecticide impregnated bed net or anti-bacterial wipes)*

Biocides and their permitted use are becoming increasingly regulated worldwide. Therefore, proficiency regarding which biocides are allowed for use in specific applications is needed.

A. Biocide Product Regulation (BPR) – EU Regulation No. 528/2012

Biocides and biocide use are regulated in the European Union by the EU Biocide Product Regulation No. 528/2012. The full text of the BPR is available directly from the eur-lex platform. [53]

A1. Scope of the BPR

The BPR applies to biocidal products and treated articles.

Biocidal products are only allowed on the EU market if they have been authorized under the BPR directive for the intended use.

A2. Product Types (PT)

Biocides are divided into 4 main groups under the BPR, with each group subdivided into different Product Types, as listed below:

- **Group 1:** Disinfectants, PT 1 to PT 5
- **Group 2:** Preservatives, PT 6 to PT 13
- **Group 3:** Pest Control, PT 14 to PT 20
- **Group 4:** Other Biocidal Products, PT 21 to PT 22

The PT describes the application area of the biocide (as an example, preservatives used on wood are listed in Group 2, Preservatives, and in Product Type 8, Wood Preservatives).

Use of biocides on VF products shall conform to the EU BPR, permitting only authorized biocidal products for the intended function.

B. Definitions within the BPR

Similar to REACh, the EU BPR applies to both Chemical Substances and Preparations and Articles.

Important definitions within the BPR are below:

[52] Ref. definition 'treated article' in Section 7 B.
[53] http://eur-lex.europa.eu/

- **Articles** are defined by their geometrical form rather than the chemical/ physical properties of the substance**.**
- **Treated Article** means any substance, mixture or article which has been treated with, or intentionally incorporates one or more biocidal products.
- **Biocidal Products** are defined as:
    - any substance or mixture, in the form in which it is supplied to the user, consisting of, containing or generating one or more active substances, with the intention of destroying, deterring, rendering harmless, preventing the action of, or otherwise exerting a controlling effect on, any harmful organism by any means other than mere physical or mechanical action,
    - any substance or mixture, generated from substances or mixtures which do not themselves fall under the first indent, to be used with the intention of destroying, deterring, rendering harmless, preventing the action of, or otherwise exerting a controlling effect on, any harmful organism by any means other than mere physical or mechanical action.
    - a treated article that has a primary biocidal function

Under the BPR, when an article has been treated to create a primary biocidal function, that article shall be defined as a biocidal product for compliance to the BPR.

C. Important aspects of the BPR

C1. Rules for the use of treated articles

When determining the allowable biocide to create a specific function, only authorized substances listed in the BPR shall be used. Authorized substances include those listed in:

- the Approved Substances List.[54]
- Annex I of the BPR
- the Review Program.[55] and non-inclusion decisions

C2. EU regulations for treated articles

"A treated article shall not be placed on the market unless all active substances contained in the biocidal products that it was treated with or incorporates are included in the list drawn up in accordance with Article 9(2) *(list of authorized substances)*, for the relevant product-type and use, or in Annex I *(substances for simplified authorisation of the biocidal product),* and any conditions or restrictions specified therein are met"

C3. Labelling requirement for treated articles

Treated articles containing a biocidal product require labelling if:

- a claim is made by the manufacturer of that treated article regarding the biocidal properties of the article, or
- in relation to the active substance(s) and the substance potential to contact humans or release into the environment, specific authorisations may require associated labelling.

Label requirements:

When required, the label shall provide the following information:

- a statement that the treated article incorporates biocidal products;
- where substantiated, the biocidal property attributed to the treated article;
- the name of all active substances contained in the biocidal products;

[54] https://echa.europa.eu/information-on-chemicals/biocidal-active-substances
[55] https://echa.europa.eu/regulations/biocidal-products-regulation/approval-of-active-substances/existing-active-substance

- the name of all nanomaterials contained in the biocidal products, followed by the word 'nano' in brackets; and
- any relevant instructions for use, including any precautions.[56]

C4. Information duty for treated articles

Similar to REACH, the BPR obligates the treated product supplier to provide information to any consumer, upon request, within 45 days and free of charge, with information regarding the biocidal treatment of the treated article.

D. Important Links

Regulation concerning the making available on the market and use of biocidal products
https://echa.europa.eu/regulations/biocidal-products-regulation/legislation

[56] It is advisable to check the Safety Data Sheet of the biocidal products used and to contact the chemical supplier for additional information and advise.

E. US biocide regulation: Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

The full text of the regulation is available directly from the EPA website[57].

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is the Federal statute that governs the registration, distribution, sale, and use of pesticides in the United States.

E1. Scope of FIFRA

FIFRA enforcement is focused on the sale, distribution, and use (which can include disposal) of pesticides. Generally, before a pesticide may be sold or distributed in the United States, it must be registered with the EPA. Before, the applicant must show, among other things, that using the pesticide according to specifications "will not generally cause unreasonable adverse effects on the environment."

E2. Antimicrobial products

Antimicrobial pesticides are substances or mixtures of substances used to destroy or suppress the growth of harmful microorganisms whether bacteria, viruses, or fungi on inanimate objects and surfaces.

Antimicrobial pesticide products are categorized as either "public health" or "non-public health", depending on the specific claims made on each product's labelling.

Public health antimicrobial pesticide products are those products that bear a claim to control pest microorganisms that pose a threat to human health, and whose presence cannot readily be observed by the user.

E3. Exemption qualification of treated articles to the regulation

EPA published a Pesticide Registration Notice 2000-1 that specifies the exemption qualification of treated articles to the regulation. Treated articles with **Non-Public Health Claims** are exempted from registration, but a label with the non-public health claim must be provided.

As long as products don't make public health claims that extend beyond the protection of the article itself, they qualify for the treated articles exemption.[58]

To qualify for the treated articles exemption, both conditions stated below must be met.

1. the incorporated pesticide is registered for use in or on the article or substance, and;
2. the sole purpose of the treatment is to protect the article or substance itself.

If both are not met, the article or substance does not qualify for the exemption and is subject to regulation under FIFRA.

Examples of labelling claims, the Agency is likely to consider **Acceptable** under the exemption for **Odor Resistant Claims**:

- This product contains an antimicrobial agent to control odors.
- This product contains an antimicrobial agent to prevent microorganisms from degrading the product.
- Resists Odors - This product has been treated to resist bacterial odors.
- Inhibits the growth of bacterial odors.
- Resists microbial odor development.
- Retards the growth and action of bacterial odors.

[57] https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act
[58] Treated Articles Exemption, section 152.25(a).

- Guards against the growth of odors from microbial causes.
- Guards against degradation from microorganisms.
- Reduces odors from microorganisms.
- Odor-resistant.
- Acts to mitigate the development of odors.

These examples, instead, represent examples of labelling claims that the Agency is likely to consider **Unacceptable** under the exemption for a treated article and that would lead to a requirement to register the article as a pesticide product;

- Antibacterial.
- Bactericidal.
- Germicidal.
- Kills pathogenic bacteria.
- Effective against E. coli and Staphylococcus.
- Provides a germ-resistant surface.
- Provides a bacteria-resistant surface.
- Surface kills common gram positive and negative bacteria.
- Surface controls both gram positive and negative bacteria.
- Surface minimizes the growth of both gram positive and negative bacteria.
- Reduces risk of cross-contamination from bacteria.
- Controls allergy causing microorganisms.

Section 8 CPSIA - United States Consumer Product Safety Improvement Act

The Consumer Product Safety Improvement Act CPSIA of 2008 reauthorizes the Consumer Product Safety Commission (CPSC) and expands the Commission's role in ensuring the safety of all consumer products, but in particular, it imposes additional requirements to enhance the safety of products designed for children up to age 12 years.

VF has established programs and procedures to comply with CPSIA and other applicable legal requirements. These include product design requirements, manufacturing specifications, and product testing programs, among other procedures as mentioned in this Product Safety Manual. VF requires all product suppliers to deliver only products that comply with applicable legal requirements and specifications, including those listed in this manual. Compliance with CPSIA requires suppliers to maintain a reasonable product testing program, quality control systems, auditing, and product tracking procedures at every production lot level.

A. Scope

CPSIA mandates testing for children's and adult products for which the CPSC has established a safety requirement. This includes but is not limited to testing for small parts (as per Title 16 CFR 1501), testing for sharp edges / points, flammability, etc.

For certain children's products, CPSIA also permanently bans eight phthalates (DEHP, DBP, BBP, DINP, DPENP, DHEXP, DCHP and DIBP). The RSL reflects these restrictions.

CPSIA mandates safety testing for every lot of products intended for children 12 years of age and younger. Suppliers are also required to label products with traceability information to allow tracking in case of a product recall.

B. Certifications

A Children's Product Certificate (CPC) must be issued for Children's products manufactured overseas, and domestically covered by CPSC rules. A General Conformity Certificate (GCC) must be issued for every non-children's (general use) product covered by CPSC rules and manufactured in or imported into the United States. The GCC is not required for adult apparel when falls into one of the exemptions identified by CPSC. CPC / GCC must be issued by the importer or domestic (US) manufacturer, not the supplier. However, the importer of the product (VF or VF subsidiary, for example) must rely upon the supplier's product safety and compliance procedures, along with the supplier's product testing reports, to ensure that the product conforms to applicable requirements.

Section 9 RSL Product Testing Guidance

Product testing requirements can be found in the VF brand specific product testing manuals. Tests specified in testing manuals are mandatory. VF Brands may also provide guidance on chemical management and RSL compliance relating to a specific VF brand.

Table 1 provides general guidance on product testing for various material types. The table is not intended to replace the mandatory VF brand specific testing requirements, however is meant to provide additional guidance to our suppliers to assist in their internal chemical management programs.

	Material Types										
Test Item	Plastics and other synthetic materials – PU, PVC, Rubber, TPU, TPR, EVA etc.	Textiles and fabrics (natural fibres)	Textiles and fabrics (synthetic fibres)	Textiles and fabrics (natural and synthetic fibre blends)	Coating/ Printing (with base material, included PU coated fabric)	Leather	Metal Parts	Adhesives	Packaging Materials	Desiccants	Durable Water Repellent, Stain Release, Membranes
Aromatic amines and salts		X	X	X	X	X		X[59]			
APs and APEOs		X	X	X		X					
Bisphenols	X		X	X	X	X					
Chlorinated Aromatics		X	X	X	X	X					
Chlorinated Paraffins	X					X					
Dimethylfumarate									X	X	
Disperse Dyes			X	X							
Other Dyes		X	X	X		X					
Formaldehyde	X[60]	X	X	X	X	X		X			
Extractable metals	X				X	X	X				
Nickel Release (direct and prolonged skin contact)							X				
Chromium VI						X					
Total Lead	X				X	X	X				
Total Cadmium	X				X	X	X				
Vinyl chloride monomer	X[61]										
Flame retardants	X[62]	X[63]	X[63]	X[63]							
Nitrosamines	X[64]										

[59] Test to per performed on compound material.
[60] Only foam materials need to be tested for formaldehyde.
[61] PVC material only.
[62] All foam materials need to be tested for flame retardants as specified in section 2, K2.
[63] Textile materials treated with flame retardant finishes need to be tested as specified in section 2, K1.
[64] Shoe sole materials, latex, rubber.

	Material Types										
Test Item	Plastics and other synthetic materials – PU, PVC, Rubber, TPU, TPR, EVA etc.	Textiles and fabrics (natural fibres)	Textiles and fabrics (synthetic fibres)	Textiles and fabrics (natural and synthetic fibre blends)	Coating/ Printing (with base material, included PU coated fabric)	Leather	Metal Parts	Adhesives	Packaging Materials	Desiccants	Durable Water Repellent, Stain Release, Membranes
Organotin Compounds	X		X	X	X	X					
PFAS											X
Phthalates	X				X			X	X		
Polycyclic Aromatic Hydrocarbons	X										
Preservatives for leather						X					
Siloxanes		X	X	X		X					
Solvents and VOCs	X				X	X		X			
Packaging									X		
p-Phenylenediamine		X	X	X	X	X		X			
2-Phenyl-2-propanol Acetophenone	X[65]										
Quinoline		X	X	X							
Pesticides		X		X		X					

Table 1 - General guidance on product testing

VF currently maintains various product testing programs to validate RSL compliance. Notwithstanding VF's testing programs, the supplier shall be fully responsible for obtaining all necessary knowledge and information required to understand and execute business processes that ensure RSL compliance. The supplier is also responsible for performing analytical testing on products to verify the product's compliance to all RSL requirements.

Products should be tested as prescribed in Table 1, which provides guidance regarding the most probable tests to conduct for a product type. However, nothing in the guidance below shall be construed to relieve a supplier from their duty to provide products compliant with the full RSL. In addition to the testing guidance provided in Table 1, VF may at any time request additional testing to validate product compliance with the RSL. All costs associated with product testing are the responsibility of the supplier.

[65] EVA material only.

Section 10 Chemical Information Log

For a good in-house RSL management system, the manufacturer should understand if the materials or chemicals used in development or production contain any restricted substances. This information may be obtained from the material/chemical supplier.

It has been a common industrial practice for manufacturer to collect SDS (Safety Data Sheet) from chemical supplier for RSL compliance validation. However, the restricted substance information may not be listed in the SDS either because of the concentration of the substance, or, the quality of the SDS. To promote transparency and accurate information flow, a Chemical Information Log (CIL) has been developed.

The manufacturer should send this RSL to their material and chemical supplier, requesting them to provide only materials/chemicals that comply with the VF RSL. The chemical supplier should also complete and return the Chemical Information Log (CIL). The VF product manufacturer should collect the updated CIL for each preparation used in the manufacture of any VF product. Note: the CIL should be completed by the chemical supplier but not the VF product manufacturer.

The CIL includes 5 columns. The first column should be completed with the chemical trade name, as indicated on product packaging documents, SDS and label. For each preparation, the chemical supplier shall indicate whether such preparation contains a RSL substance.

When a preparation contains an RSL substance in a concentration that could cause a VF product to exceed corresponding RSL restrictions, the chemical supplier should indicate this by identifying the RSL substance and concentration on the CIL. The concentration indicated on the CIL must be the concentration of the RSL substance in the chemical preparation.

Chemical Information Log (CIL)

For VF Corporation RSL 2023

Date of Log:		**Name of Requesting Supplier/Vendor**
Name of Chemical Supplier:		
Address of Supplier		

Instructions: Please indicate if any chemical or other good you supply to VF or a VF brand, or used in the manufacture of any VF branded product, contains or may form any RSL listed substance in a concentration on the product that would exceed any prohibition, limitation or other requirement as listed in the VF RSL.

Trade Name	Yes – Contains RSL Substance [√ check if true]	RSL Substance	CAS No.	Concentration in preparation

The undersigned is an owner, director, officer, managing agent or other person authorized to execute this Chemical Information Log on the behalf of the chemical supplier.

Name (Please Print)**:** _____

Signature: _____

Position: _____

E-mail: _____

Company Stamp: _____

Appendix 1: VF RSL Contacts

BRAND	NAME	E-MAIL ADDRESS
Altra, Eagle Creek, Jansport, The North Face – US	Ariel Cuevas	ariel_cuevas@vfc.com
Altra, Eastpak, Jansport, Smartwool – US	Sean Horning	sean_horning@vfc.com
Icebreaker	Jordi Beneyto Ferre	jordi_beneytoferre@vfc.com
Dickies – US	Johanna Dihmes Mejia	johanna_dihmesmejia@vfc.com
Dickies, Napapijri – EU	Carlo Sassoli	carlo_sassoli@vfc.com
Eastpak, Kipling	Guy Vanderghinste	guy_vanderghinste@vfc.com
Eastpak, Kipling	Peter Sweron	peter_sweron@vfc.com
The North Face, Timberland, Vans, Smartwool – EU	Luca Barbiera	luca_barbiera@vfc.com
Timberland Footwear	Jason Richardson	jason_richardson@vfc.com tbl_qa@vfc.com
Vans	Kim Richardson	kimberly_richardson@vfc.com
CORPORATE DEPT.	**NAME**	**E-MAIL ADDRESS**
VF Americas	Sarah Liao	sarah_liao@vfc.com
VF Asia	Alvin Tan	alvin_tan@vfc.com
VF Asia	Lilian Lim	lilian_lim@vfc.com
VF Asia	Lydia Kang	lydia_kang@vfc.com
VF Asia Footwear	Michael Chen	michael_chen@vfc.com
VF Corporation	Harsha Chenna	harsha_chenna@vfc.com
VF Corporation	Sean Cady	sean_cady@vfc.com
VF Europe	Frank Opdenacker	frank_opdenacker@vfc.com
VF Europe	Ben Pearson	ben_pearson@vfc.com
VF Europe	Pierre Ierardi	pierre_ierardi@vfc.com

Appendix 2: Definitions

Accessories – Products other than a standard shirt, shoe or pant. These may include both apparel and non-apparel products such as belts, caps, wallets, handbags, socks, eyewear, watches, and more. All accessories carrying a VF brand logo or manufactured for VF Corporation shall comply with the VF Restricted Substance List (RSL).

AP – Alkylphenols. For the scope of this RSL, limited to Nonylphenol (NP), Octylphenol (OP) and their isomers.

APEO – Alkylphenols ethoxylates. For the scope of this RSL, limited to Nonylphenol ethoxylate (NPEO) and Octylphenol ethoxylate (OPEO).

Article – An object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition.

Authorisation – One of the pillars of the European REACH regulation, where producers and importers of hazardous chemicals require a special permission to place these chemicals on the European market.

Battery Directive – The Battery Directive cover all batteries and accumulators, if incorporated into appliances.

Bioaccumulative – Bioaccumulative is property causing the substances to build up (accumulate) in the body. Such substances build up in fat tissue in the body and cannot be excreted by the body.

Can be placed in the mouth – Article or part of an article which has at least one dimension less than 5 cm.

Candidate List – A list of substances meeting the criteria of Substances of Very High Concern as defined within REACH, and proposed by either the European Commission or the EU Member states. These substances are candidates for Authorisation.

Carcinogenic – A carcinogenic substance causes cancer.

Chemical Abstract Service (CAS) Number – The CAS number is a unique number that identifies a particular chemical structure. While there may be various synonyms and different naming conventions for a chemical, there is only one CAS number. Mixtures of chemicals do not have CAS numbers; only individual chemical components have CAS numbers. When there is doubt about the chemical name used in the RSL, always check the CAS number.

Childcare Articles – Childcare articles shall mean any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.

Children's Products – Children's products are products designed or intended primarily for children 12 years of age or younger.

CMR1 and CMR2 – **Carcinogenic, Mutagenic and Repro-toxic** chemicals, abbreviated as **CMR** chemicals, make up the first and most toxic category of the toxicity classes into which hazardous chemicals can be subdivided, according to EU legislation. Carcinogenic chemicals can cause or promote cancers. Mutagenic chemicals can cause genetic mutations. Repro-toxic chemicals can damage the reproductive process.

CPSIA – The United States Consumer Product Safety Improvement Act of 2008, which expands the Consumer Product Safety Commission's role in ensuring the safety of consumer products distributed throughout the United States of America. Detailed information can be found at http://www.cpsc.gov/.

Detection Limit – The detection limit specifies the test method sensitivity that a laboratory must be able to achieve when measuring the respective substance.

Direct and prolonged contact with the skin – continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day. Definition according to Entry 51 of Annex XVII to Reach.

ECHA – The European Chemicals Agency, located in Helsinki, Finland, and the administering body for REACH. Detailed information can be found at http://echa.europa.eu/.

Evaluation –The second part of REACH where information submitted to the European Chemicals Agency by producers and importers during the Registration phase is examined and evaluated.

Flame retardant – Any chemical or chemical compound for which a functional use is to resist or inhibit the spread of fire. Flame Retardant Chemicals include, but are not limited to, halogenated, phosphorous based, nitrogen based, and nanoscale flame retardants.

Food Contact Materials – Any VF Product that is intended to be used to carry, hold or otherwise store food or liquid for drinking. Examples include water bottles, hydration packs, coolers and more.

Limit Value – The concentration limit is set for each substance as measured on the final product and represents the maximum allowable amount of the respective substance which is allowable in a RSL-compliance product. The concentration limit is shown in the Limit Value column. The limit is specified as the amount of the substance found in a specified amount of substrate, by weight (or more specifically, in milligrams of the substance per kilogram of product [mg/kg]). Concentration limits are applicable to any single part, or homogeneous part, of a product.

N/A - Not Applicable.

Packaging and Packaging Materials - Means any container providing a means of marketing, protecting, or handling a product from its point of manufacture to its sale or transfer to a consumer, including a unity package, an intermediate package or a shipping container, as defined in the specification ASTM D996. Packaging also includes, but is not limited to, unsealed receptacles, including carrying cases, crates, cups, pails, rigid foil and other trays, wrapper, sand wrapping films, bags, boxes, tape, and tubs.

PBT – Substances that are Persistent, Bioaccumulative and Toxic are substances that do not easily break down, instead they build up in nature and in the fatty tissue of mammals, with a potential to cause serious and long-term irreversible effects. Part of the REACH Substances of Very High Concern.

Persistent – A persistent substance will not break down or degrade in humans, animals or nature. This means that they will stay for a very long time once produced.

Polyvinyl Chloride (PVC) – Polyvinyl chloride, or PVC for short, is a hard plastic that may be found in packaging materials, trims, footwear, and screen printing. PVC is prohibited from use in all VF packaging and food contact products. In addition, VF prefers all products do not contain PVC and supports efforts to phase-out PVC.

Products – all raw materials, including all chemical substances, and all other goods, provided to VF or its suppliers or finishing contractors for use in the manufacture or assembly of any finished product manufactured for, labelled by, offered for sale by, sold by, or distributed by, VF or any of its subsidiaries.

Reporting Limit (RL) – The reporting limit is the lowest concentration of a substance the laboratory is allowed to report. If the laboratory detects an amount of the substance below the RL, the laboratory shall state their findings in the laboratory test report as Not Detected.

Registration – The first phase of the REACH process where all chemicals manufactured in or imported into the European Union in volumes above one ton per year, have to be registered to the European Chemicals Agency (ECHA).

RoHS Electrical and Electronic Equipment - The RoHS restrictions cover the actual electronic parts and ancillary portions of the final electrical or electronic product. Products covered by this requirement include:

- Large and small household appliances
- IT equipment
- Telecommunications equipment (although infrastructure equipment is exempt in some countries)

- Consumer equipment
- Lighting equipment - including light bulbs
- Electronic and electrical tools
- Toys, leisure, and sports equipment
- Medical devices (currently exempt)
- Monitoring and control instruments (currently exempt)
- Automatic dispensers

In addition, the components of the above products must meet the RoHS requirements. Examples include:

- Paints and pigments
- PVC (vinyl) cables as a stabilizer (e.g. power cords, USB cables)
- Solders
- Printed circuit board finishes, leads, internal and external interconnects
- Glass in television and photographic products (e.g. CRT television screens and camera lenses)
- Metal parts
- Lamps and bulbs

Sunset date – A date where after a substance subject to Authorisation may not be used anymore, unless an Authorisation has been granted by the European Commission.

SVHC – An abbreviation for Substances of Very High Concern and referring to the most hazardous substances according article 57 of REACH. (see also Section 6E).

Toxic – Toxicity is an intrinsic property of a substance rendering it to harm, impair or damage living organisms.

Toxic for Reproduction – A substance which is toxic for reproduction will impair the ability to have children or cause irreversible harm to the offspring itself.

Trace Amount (TR) – The trace amount is the allowable unavoidable trace presence of a substance that has been identified with a usage ban. While a substance may not be used in the production of a product, a small acceptable trace amount is allowed to be found on a RSL-compliant product due to minor contamination or atmospheric absorption.

Usage Ban – A usage ban is the prohibition of the intentional use of the respective substance during any stage of production of the VF Product or any Raw Material.

vPvB – vPvB are substances that are very Persistent and very Bioaccumulative. Even when such substances would not be categorized as toxic, they are still considered to be Substances of Very High Concern according to REACH because they persist in the environment and accumulate in the food chain for a long period of time.

Appendix 3: Reporting limits

The test method indicated shall be used by the VF approved laboratory to determine compliance with the RSL. VF requires the lab to adopt a reporting limit not greater than the one here indicated.

TEST ITEMS	TEST METHOD	REPORTING LIMIT (MG/KG)
Aromatic Amines from Azo Dyes	ISO 14362-1 / ISO 14362-3 ISO 17234-1 / ISO 17234-2 GB/T 17592 / GB/T 23344 GB/T 19942	5
Alkyl Phenols and Alkyl Phenol Ethoxylates (APs and APEOs)		
Nonylphenol (NP)	ISO 21084 GB/T 23322	3
Octylphenol (OP)		
Nonylphenol ethoxylate (NPEO)	ISO 18254-1 ISO 18218-1 GB/T 23322	20
Octylphenol ethoxylate (OPEO)		
Bisphenol A (BPA)	Extraction in THF (1 g of sample in 20 ml THF, sonication at 60°C for 60 min) + LC-MS Acetonitrile extraction (OEHHA method)/ LC-MS	0.1
Chlorinated Aromatics		
Chlorinated benzenes	EN 17137	0.1
Chlorinated toluenes		
Trichlorophenols	DIN 50009 ISO 17070	0.5
Tetrachlorophenols (TeCP)		
Pentachlorophenol (PCP)		
Chlorinated Paraffins		
Short chain chlorinated paraffins (SCCP) (C10-C13)	Leather: ISO 18219-1 (SCCP) ISO 18219-2 (MCCP) Textiles: ISO 22818:2021 (SCCP + MCCP)	100
Medium chain chlorinated paraffins (MCCP) (C14-C17)		100
Dimethyl fumarate (DMFu)	EN 17130 ISO 16186	0.05
Disperse Dyes	DIN 54231	15
Other Dyes	DIN 54231	15
Navy Blue	DIN 54231	50
Formaldehyde	ISO 14184-1 ISO 17226-1 GB/T 19941	16
	EN 717-3	16
	EN 645 EN 1541	10
Extractable Metal Content		
Antimony (Sb)		1

TEST ITEMS	TEST METHOD	REPORTING LIMIT (MG/KG)
Arsenic (As)	EN 16711-2 ISO 17072-1	0.2
Cadmium (Cd)		0.1
Chromium (Cr)		0.5
Cobalt (Co)		1
Copper (Cu)		5
Lead (Pb)		0.2
Mercury (Hg)		0.02
Nickel (Ni)		0.5
Chromium, Hexavalent Cr(VI)	ISO 10195 Method A2 + ISO 17075	1
Extractable Metal Content		
Antimony (Sb)	EN 71-3	10
Arsenic (As)		0.2
Barium (Ba)		50
Cadmium (Cd)		0.1
Chromium (Cr)		0.5
Chromium, Hexavalent Cr(VI)		0.053
Cobalt		1
Lead (Pb)		0.2
Mercury (Hg)		0.02
Nickel (Ni)		0.5
Selenium (Se)		10
Total Metal Content		
Cadmium (Cd)	EN 16711-1 ISO 17072-2	5
Lead (Pb)	ASTM F2853 GAFTI Modified CPSC-CH-E1001-08 CPSC-CH-E1002-08 CPSC-CH-E1003-09	5
Nickel Release	EN 1811 + EN 12472	0.1
	EN 16128 + EN 12472	0.1
Styrene, free	Extraction in methanol (sonication at 60°C for 60 min) + GC-MS	50
Vinyl chloride monomer	ISO 6401	0.5
Flame Retardant Restrictions For All Products	Combined CADS/ISO 18219 method V1:06/17 Extraction ISO 18219 and analysis by GC-NCI-MS	30 SCCP/MCCP 100
	Solvent extraction / GC-MS or LC-MS ISO 17881-1 ISO 17881-2	5
N-Nitrosamines	GB/T 24153 with LC-MS/MS verification if positive ISO 19577	0.5
Organotin Compounds	ISO 22744-1	0.05
PFAS		

TEST ITEMS	TEST METHOD	REPORTING LIMIT (MG/KG)
PFOS, its salts and derivatives	ISO 23702-1	1 µg/m^2
PFOA and its salts	ISO 23702-1	1 µg/m^2
PFOA related substances	ISO 23702-1	0.3
Long-chain perfluorocarboxylic acids (PFCAs) and their salts	ISO 23702-1	0.025
Long-chain perfluorocarboxylic acids (PFCAs) related substances	ISO 23702-1	0.260
Short chain perfluorocarboxylic acids (C6)	ISO 23702-1	0.3
Phthalates	GAFTI Modified CPSC-CH-C1001-09.4	100
Polycyclic Aromatic Hydrocarbons (PAH)	EN 17132 AfPS GS 2014:01	0.2
Preservatives for leather	ISO 13365	1
Siloxanes	Solvent extraction / GC-MS	100
Solvents and Volatile Organic Compounds (VOCs)		
Benzene	Extraction in methanol (sonication at 60°C for 60 min) + GC-MS ISO/TS 16189	1
All others		50
Others		
p-Phenylenediamine	EN 14362-1 without cleavage	5
2-phenyl-2-propanol	Extraction in acetone or methanol (sonication at 60°C for 30 min) + GC-MS	10
Acetophenone		
Quinoline	DIN 54231 with methanol extraction at 70°C	15
Restrictions on Packaging		
Cadmium (Cd)	CEN/TR 13695-1	10
Lead (Pb)		10
Chromium, Hexavalent Cr(VI)		3
Mercury (Hg)		10
RoHS		
Cadmium (Cd)	IEC 62321	10
Chromium, Hexavalent Cr(VI)		10
Lead (Pb)		10
Mercury (Hg)		10
Polybrominated biphenyls (PBB)		10
Polybrominated diphenyl ethers (PBDE)		10
Batteries		
Cadmium (Cd)	EN 16711-1	5
Mercury (Hg)	EN 16711-1	5
Food Contact Materials		

TEST ITEMS	TEST METHOD	REPORTING LIMIT (MG/KG)
Bisphenol A (BPA)	Solvent extraction / LC-MS	0.1
Toys		
Aniline	ISO 14362-1 ISO 17234-1	5
Bisphenol A (BPA)	EN 71-10 + EN 71-11	0.01 mg/L
Formamide	Solvent extraction with GC-MS analysis	5
Reaction mass of: 5-chloro-2- methyl-4- isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)	EN 71-10 + LC-MS/MS	
5-Chloro-2-methyl- isothiazolin-3(2H)- one	EN 71-10 + LC-MS/MS	0.6
2-methylisothiazolin-3(2H)-one	EN 71-10 + LC-MS/MS	0.2
Phenol	EN 71-10 + EN 71-11	polymeric material: 1 mg/L preservatives: 5 mg/kg
Tris(2-chloroethyl) phosphate (TCEP)	Solvent extraction/ GC-MS or LC-MS	5
Tris(1-chloro-2-propyl) phosphate (TCPP)	Solvent extraction/ GC-MS or LC-MS	5
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	Solvent extraction/ GC-MS or LC-MS	5

Appendix 4: Index of CAS Numbers

CAS Number	Chemical Substance	RSL Section
50-00-0	Formaldehyde	2H
50-29-3	*p,p*-Dichlorodiphenyl-trichloroethane (*p,p*-DDT)	3C
50-32-8	Benzo[a]pyrene, Benzo [def]chrysene	2P, 6D
53-19-0	*o,p*-Dichlorodiphenyl-dichloroethane (*o,p*-DDD)	3C
53-70-3	Dibenzo[a,h]anthracene	2P
55-18-5	N-nitrosodiethylamine	2L
56-23-5	Tetrachloromethane	2S, 4B Group 4
56-35-9	Bis(tributyltin)oxide (TBTO)	6D
56-38-2	Parathion	3C
56-55-3	Benzo[a]anthracene	2P, 6D
56-72-4	Coumaphos	3C
57-74-9	Chlordane	3C
58-89-9	γ-hexachlorocyclohexane	3C
58-90-2	2,3,4,6-Tetrachlorophenol	2D2
59-50-7	p-chloro-m-cresol (PCMC)	2Q
59-89-2	N-nitrosomorpholine	2L
60-09-3	4-Aminoazobenzene	2A, 6D
60-11-7	4-Dimethylaminoazobenzene (Solvent Yellow 2)	2G2
60-51-5	Dimethoate	3C
60-57-1	Dieldrin	3C
62-53-3	Aniline	2A
62-75-9	N-Nitrosodimethylamine	2L
63-25-2	Carbaryl	3C
64-67-5	Diethyl sulphate	6D
67-66-3	Trichloromethane (Chloroform)	2S
68-12-2	N,N-Dimethylformamide (DMF)	2S, 6D
71-43-2	Benzene	2S
71-48-7	Cobalt(II) diacetate	6D
71-55-6	1,1,1-Trichloroethane ($C_2H_3Cl_3$)	2S, 4B Group 5
72-20-8	Endrin	3C
72-43-5	Methoxychlor	3C
72-54-8	*p,p*-Dichlorodiphenyl-dichloroethane (*p,p*-DDD)	3C
72-55-9	*p,p*-Dichlorodiphenyl-dichloroethylene (*p,p*-DDE)	3C
72-56-0	Perthane	3C
74-83-9	CH_3Br	4B Group 6
74-97-5	CH_2BrCl	4B Group 8

CAS Number	Chemical Substance	RSL Section
75-01-4	Vinyl Chloride	2J, 2W
75-10-5	HFC-32 - CH_2F_2	4A
75-12-7	Formamide	6D
75-15-0	Carbon Disulfide	2S
75-35-4	1,1-Dichloroethylene	2S
75-37-6	HFC-152a - CH_3CHF_2	4A
75-43-4	$CHFCl_2$	4C
75-45-6	CHF_2Cl	4C
75-46-7	HFC-23 - CHF_3	4A
75-63-8	CF_3Br	4B Group 2
75-68-3	$C_2H_3F_2Cl$	4C
75-69-4	$CFCl_3$	4B Group 1
75-71-8	CF_2Cl_2	4B Group 1
75-72-9	CF_3Cl	4B Group 3
75-73-0	Perfluoromethane - CF_4	4A
75-88-7	$C_2H_2F_3Cl$	4C
76-01-7	Pentachloroethane	2S
76-12-0	$C_2F_2Cl_4$	4B Group 3
76-13-1	$C_2F_3Cl_3$	4B Group 1
76-14-2	$C_2F_4Cl_2$	4B Group 1
76-15-3	C_2F_5Cl	4B Group 1
76-16-4	Perfluoroethane - C_2F_6	4A
76-19-7	Perfluoropropane - C_3F_8	4A
76-44-8	Heptachlor	3C
77-40-7	4,4'-(1-methylpropylidene)bisphenol (Bisphenol B)	2C, 6D
78-30-8	Tri-o-cresyl phosphate	2K1
78-33-1	Tris(4-tert-butylphenyl) phosphate (TBPP)	2K2
78-48-8	DEF	3C
79-00-5	1,1,2-Trichloroethane	2S
79-01-6	Trichloroethylene	2S, 6D
79-06-1	Acrylamide	6D
79-34-5	1,1,2,2-Tetrachloroethane	2S
79-94-7	Tetrabromobisphenol A (TBBP A), 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	2K1, 6D
80-05-7	Bisphenol A (BPA)	2C, 2W, 6D
80-09-1	4,4'-sulphonyldiphenol (BPS)	6D
80-46-6	p-(1,1-dimethylpropyl)phenol	6D
81-15-2	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	6D
82-28-0	Disperse Orange 11	2G1
82-68-8	Quintozene	3C

CAS Number	Chemical Substance	RSL Section
83-32-9	Acenaphthene	2P
84-61-7	Dicyclohexyl phthalate (DCHP)	2O, 2U, 2W, 6D
84-66-2	Diethyl phthalate (DEP)	2O, 2U, 2W
84-69-5	Di-iso-butyl phthalate (DIBP)	2O, 2U, 2V, 2W, 6D
84-74-2	Dibutyl phthalate (DBP)	2O, 2U, 2V, 2W, 6D
84-75-3	Di-n-hexyl phthalate (DnHP or DHEXP)	2O, 2U, 2W, 6D
85-01-8	Phenanthrene	2P, 6D
85-68-7	Butyl benzyl phthalate (BBP)	2O, 2U, 2V, 2W, 6D
86-50-0	Azinophosmethyl	3C
86-73-7	Fluorene	2P
87-61-6	1,2,3-Trichlorobenzene	2D1
87-62-7	2,6-Xylidine	2A
87-65-0	2,6-Dichlorophenol	2D2
87-68-3	Hexachlorobutadiene	3D
87-86-5	Pentachlorophenol (PCP)	2D2
88-06-2	2,4,6-Trichlorophenol	2D2
88-85-7	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	3C, 6D
90-04-0	2-Methoxyaniline; o-Anisidine	2A, 6D
90-43-7	o-Phenylphenol (OPP)	2D2, 2Q
90-94-8	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	6D
91-20-3	Naphthalene	2P
91-22-5	Quinoline	2T
91-59-8	2-Naphthylamine	2A
91-94-1	3,3´-Dichlorobenzidine	2A
92-67-1	4-Aminodiphenyl, Biphenyl-4-ylamine	2A, 6D
92-87-5	Benzidine	2A
93-65-2	Mecoprop	3C
93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid, salts, compounds	3C
93-76-5	2,4,5-Trichlorophenoxyacetic acid (2,4,5-T), salts, compounds	3C
94-26-8	Butyl 4-hydroxybenzoate (Butylparaben)	6D
94-74-6	MCPA	3C
94-75-7	2,4-Dichlorophenoxy-acetic acid, its salts and compounds (2,4-D)	3C
94-81-5	MCPB	3C
95-49-8	2-Chlorotoluene	2D1
95-50-1	1,2-Dichlorobenzene	2D1
95-53-4	*o*-Toluidine	2A, 6D
95-57-8	2-Chlorophenol	2D2
95-68-1	2,4-Xylidine	2A
95-69-2	4-Chloro-*o*-toluidine	2A

CAS Number	Chemical Substance	RSL Section
95-73-8	2,4-Dichlorotoluene	2D1
95-75-0	3,4-Dichlorotoluene	2D1
95-77-2	3,4-Dichlorophenol	2D2
95-80-7	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	2A, 6D
95-94-3	1,2,4,5-Tetrachlorobenzene	2D1
95-95-4	2,4,5-Trichlorophenol	2D2
96-12-8	1,2-Dibromo-3-Chloropropane (DBCP)	3C
96-13-9	2,3-dibromo-1-propanol (2,3-DBPA)	6D
96-45-7	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	6D
97-56-3	o-aminoazotoluene	2A, 6D
98-07-7	α,α,α-Trichlorotoluene	2D1
98-54-4	4-tert-butylphenol	6D
98-86-2	Acetophenone	2T
99-55-8	2-Amino-4-nitrotoluene	2A
100-41-4	Ethylbenzene	2S
100-42-5	Styrene	2J, 2S
100-44-7	α-Chlorotoluene, Benzyl chloride	2D1
100-75-4	N-nitrosopiperidine	2L
101-14-4	4,4´-Methylene-bis-(2-chloraniline); 2,2'-dichloro-4,4'-methylenedianiline	2A, 6D
101-77-9	4,4'- Diaminodiphenylmethane (MDA)	2A, 6D
101-80-4	4,4´-Oxydianiline	2A, 6D
104-40-5	4-Nonylphenol	2B
106-43-4	4-Chlorotoluene	2D1
106-46-7	1,4-Dichlorobenzene	2D1
106-47-8	p-Chloroaniline	2A
106-48-9	4-Chlorophenol	2D2
106-50-3	p-Phenylenediamine	2T
106-93-4	Ethylene Dibromide	3C
107-06-2	1,2-Dichloroethane	2S, 6D
107-15-3	Ethylenediamine (EDA)	6D
108-41-8	3-Chlorotoluene	2D1
108-43-0	3-Chlorophenol	2D2
108-70-3	1,3,5-Trichlorobenzene	2D1
108-78-1	Melamine	6D
108-88-3	Toluene	2S
108-90-7	Chlorobenzene	2D1
108-95-2	Phenol	2X
109-86-4	2-Methoxyethanol	6D
110-49-6	2-Methoxyethyl acetate	6D

CAS Number	Chemical Substance	RSL Section
110-80-5	2-Ethoxyethanol	6D
111-30-8	Glutaral	6D
115-25-3	Perfluorocyclobutane - c-C_4F_8	4A
115-29-7	Endosulfan	3C
115-32-2	Dicofol	3C
115-86-6	Triphenyl phosphate (TPP)	2K2
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	2K1, 6D
116-06-3	Aldicarb	3C
117-81-7	Bis(2-ethylhexyl) phthalate (DEHP)	2O, 2U, 2V, 2W, 6D
117-82-8	Bis(2-methoxyethyl) phthalate (DMEP)	2O, 2U, 2W, 6D
117-84-0	Di-n-octyl phthalate (DNOP)	2O, 2U, 2W
118-69-4	2,6-Dichlorotoluene	2D1
118-74-1	Hexachlorobenzene	2D1
119-15-3	Disperse Yellow 1	2G1
119-47-1	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	6D
119-90-4	3,3´-Dimethoxybenzidine	2A
119-93-7	3,3´-Dimethylbenzidine	2A
120-12-7	Anthracene	2P, 6D
120-36-5	Dichlorprop	3C
120-71-8	6-methoxy-m-toluidine (p-cresidine)	2A, 6D
120-82-1	1,2,4-Trichlorobenzene	2D1
120-83-2	2,4-Dichlorophenol	2D2
121-14-2	2,4-dinitrotoluene	6D
121-75-5	Malathion	3C
123-77-3	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	6D
123-91-1	1,4-dioxane	6D
124-73-2	$C_2F_4Br_2$	4B Group 2
126-72-7	Tris(2,3-dibromopropyl) phosphate (TRIS)	2K1
127-18-4	Tetrachloroethene (Perchloroethylene)	2S
127-19-5	Dimethylacetamide (DMAC); N,N-dimethylacetamide	2S, 6D
128-95-0	Disperse Violet 1	2G1
129-00-0	Pyrene	2P, 6D
131-11-3	Dimethyl phthalate (DMP)	2O, 2U, 2W
131-18-0	Di-n-pentyl phthalate (DnPP or DPENP)	2O, 2U, 2W, 6D
137-17-7	2,4,5-Trimethylaniline	2A
139-65-1	4,4´-Thiodianiline	2A
140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol	6D
141-66-2	Dicrotophos	3C
143-24-8	Bis(2-(2-methoxyethoxy)ethyl)ether	6D

CAS Number	Chemical Substance	RSL Section
143-50-0	Kepone (Chlorodecone)	3C
191-24-2	Benzo[ghi]perylene	2P, 6D
192-97-2	Benzo[e]pyrene	2P
193-39-5	Indeno[1,2,3-cd]pyrene	2P
205-82-3	Benzo[j]fluoranthene	2P
205-99-2	Benzo[b]fluoranthene; 3,4-Benz[e]acephenanthrylene	2P
206-44-0	Fluoranthene	2P, 6D
207-08-9	Benzo[k]fluoranthene	2P, 6D
208-96-8	Acenaphthylene	2P
218-01-9	Chrysene	2P, 6D
297-78-9	Telodrin	3C
298-00-0	Methyl Parathion	3C
302-01-2	Hydrazine	6D
306-83-2	$C_2HF_3Cl_2$	4C
307-24-4	Undecafluorohexanoic acid (PFHxA)	2N6, 2U, 2W
307-35-7	Perfluoro-1-octanesulfonyl fluoride (POSF)	2N1, 2U, 2W
307-55-1	Tricosafluorododecanoic acid (PFDoDA, C12-PFCA)	2N4, 2U, 2W
309-00-2	Aldrin	3C
319-84-6	α-hexachlorocyclohexane	3C
319-85-7	β-hexachlorocyclohexane	3C
319-86-8	δ-hexachlorocyclohexane	3C
333-41-5	Diazinon	3C
335-66-0	Perfluorooctanoyl fluoride (PFOA-F)	2N2, 2U, 2W
335-67-1	Perfluorooctanoic acid; Pentadecafluorooctanoic acid (PFOA)	2N2, 2U, 2W, 6D
335-76-2	Nonadecafluorodecanoic acid (PFDA, C10-PFCA)	2N4, 2U, 2W, 6D
335-93-3	Silver perfluorooctanoate (PFOA-Ag)	2N2, 2U, 2W
335-95-5	Sodium perfluorooctanoate (PFOA-Na)	2N2, 2U, 2W
353-36-6	HFC-161 - CH_3CH_2F	4A
353-59-3	CF_2ClBr	4B Group 2
354-14-3	C_2HFCl_4	4C
354-21-2	$C_2HF_2Cl_3$	4C
354-33-6	HFC-125 - CHF_2CF_3	4A
354-56-3	C_2FCl_5	4B Group 3
355-25-9	Perfluorobutane - C_4F_{10}	4A
355-42-0	Perfluorohexane - C_6F_{14}	4A
355-46-4	Perfluorohexane-1-sulfonic acid (PFHxS)	2N6, 2U, 2W, 6D
359-28-4	$C_2H_2FCl_3$	4C
359-35-3	HFC-134 - CHF_2CHF_2	4A
375-73-5	Perfluorobutane sulfonic acid (PFBS)	6D

CAS Number	Chemical Substance	RSL Section
375-95-1	Perfluorononanoic acid (PFNA, C9-PFCA)	2N4, 2U, 2W, 6D
376-06-7	Heptacosafluorotetradecanoic acid (PFTDA, C14-PFCA)	2N4, 2U, 2W
376-27-2	Methyl perfluorooctanoate (Me-PFOA)	2N3, 2U, 2W
406-58-6	HFC-365 mfc - $CF_3CH_2CF_2CH_3$	4A
420-46-2	HFC-143 - CH_2FCHF_2	4A
420-97-3	$C_3H_5FCl_2$	4C
421-02-3	$C_3H_5F_2Cl$	4C
421-41-0	$C_3H_4FCl_3$	4C
421-94-3	$C_3H_2FCl_5$	4C
422-26-4	C_3HFCl_6	4C
422-49-1	$C_3HF_2Cl_5$	4C
422-52-6	$C_3HF_3Cl_4$	4C
422-54-8	$C_3HF_4Cl_3$	4C
422-56-0	$C_3HF_5Cl_2$	4C
422-78-6	C_3FCl_7	4B Group 3
422-86-6	C_3F_7Cl	4B Group 3
425-94-5	$C_3H_2F_4Cl_2$	4C
430-55-7	C_3H_6FCl	4C
431-63-0	HFC-236ea - CHF_2CHFCF_3	4A
431-87-8	C_3HF_6Cl	4C
431-89-0	HFC-227ea - CF_3CHFCF_3	4A
460-35-5	$C_3H_4F_3Cl$	4C
460-63-9	$C_3H_3F_2Cl_3$	4C
460-69-5	$C_3H_3F_3Cl_2$	4C
460-73-1	HFC-245fa - $CHF_2CH_2CF_3$	4A
460-89-9	$C_3H_2F_2Cl_4$	4C
460-92-4	$C_3H_2F_5Cl$	4C
465-73-6	Isodrin	3C
470-46-6	HFC-143a - CH_3CF_3	4A
470-90-6	Chlorfenvinphos	3C
507-55-1	$C_3HF_5Cl_2$	4C
510-15-6	Chlorobenzilate	3C
512-56-1	Trimethyl phosphate	2K1
513-79-1	Cobalt(II) carbonate	6D
540-97-6	Dodecamethylcyclohexasiloxane (D6)	2R, 6D
541-02-6	Decamethylcyclopentasiloxane (D5)	2R, 6D
541-73-1	1,3-Dichlorobenzene	2D1
545-55-1	Tris(1-aziridinyl)-phosphate oxide (TEPA)	2K1
548-62-9	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	2G2, 6D

CAS Number	Chemical Substance	RSL Section
552-30-7	Benzene-1,2,4-tricarboxylic acid; 1,2 anhydride (trimellitic anhydride) (TMA)	6D
553-00-4	2-Naphthylammoniumacetate	2A1
556-67-2	Octamethylcyclotetrasiloxane (D4)	2R, 6D
561-41-1	4,4’-bis(dimethylamino)-4’’-(methylamino)trityl alcohol	2G2, 6D
569-61-9	Basic Red 9	2G2
569-64-2	Basic Green 4	2G2
573-58-0	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	2G2, 6D
576-24-9	2,3-Dichlorophenol	2D2
583-78-8	2,5-Dichlorophenol	2D2
591-35-5	3,5-Dichlorophenol	2D2
593-53-3	HFC-41 - CH_3F	4A
593-70-4	CH_2FCl	4C
605-50-5	Di-iso-pentyl phthalate (DIPP)	2O, 2U, 2W, 6D
608-73-1	Hexachlorocyclohexane (HCH)	3C
608-93-5	Pentachlorobenzene	2D1
609-19-8	3,4,5-Trichlorophenol	2D2
612-64-6	N-nitroso-N-ethylaniline	2L
614-00-6	N-nitroso-N-methylaniline	2L
615-05-4	2,4-Diaminoanisole	2A
617-94-7	2-phenyl-2-propanol	2T
620-92-8	Bisphenol F (BPF)	2C
621-64-7	N-nitrosodipropylamine	2L
624-49-7	Dimethylfumarate (DMFu)	2F, 2U
624-72-6	HFC-152 - CH_2FCH_2F	4A
625-45-6	Methoxyacetic acid	6D
629-14-1	1,2-Diethoxyethane	6D
630-20-6	1,1,1,2-Tetrachloroethane	2S
632-99-5	Basic Violet 14	2G2
634-66-2	1,2,3,4-Tetrachlorobenzene	2D1
634-90-2	1,2,3,5-Tetrachlorobenzene	2D1
661-97-2	$C_3F_6Cl_2$	4B Group 3
666-27-3	$C_3H_3FCl_4$	4C
677-56-5	HFC-236cb - $CH_2FCF_2CF_3$	4A
678-26-2	Perfluoropentane - C_5F_{12}	4A
678-39-7	2-Perfluorooctylethanol (8:2 FTOH)	2N3, 2U, 2W
679-86-7	HFC-245ca - $CH_2FCF_2CHF_2$	4A
683-18-1	Dibutyltin dichloride (DBTC)	6D
690-39-1	HFC-236fa - $CF_3CH_2CF_3$	4A
693-98-1	2-methylimidazole	6D

CAS Number	Chemical Substance	RSL Section
730-40-5	Disperse Orange 3	2G1
731-27-1	Tolylfluanid	3C
754-91-6	Perfluorooctane sulfonamide (PFOSA)	2N1, 2U, 2W
789-02-6	*o,p*-Dichlorodiphenyl-trichloroethane (*o,p*-DDT)	3C
811-97-2	HFC-134a - CH_2FCF_3	4A
819-00-1	$C_3H_4F_2Cl_2$	4C
838-88-0	4,4'-methylenedi-o-toluidine; 3,3´-Dimethyl-4,4´-diamino-diphenylmethane	2A, 6D
872-50-4	N-Methylpyrrolidone (NMP); 1-Methyl-2-pyrrolidone	2S, 6D
875-40-1	2,3,4,6-Tetrachlorotoluene	2D1
877-11-2	Pentachlorotoluene	2D1
924-16-3	N-nitrosodibutylamine	2L
924-42-5	N-(hydroxymethyl)acrylamide	
930-55-2	N-nitrosopyrrolidine	2L
933-75-5	2,3,6-Trichlorophenol	2D2
933-78-8	2,3,5-Trichlorophenol	2D2
935-95-5	2,3,5,6-Tetrachlorophenol	2D2
959-98-8	alpha-Endosulfan	3C
1006-31-1	2,3,5,6-Tetrachlorotoluene	2D1
1024-57-3	Heptachlor epoxide	3C
1067-53-4	Tris(2-methoxyethoxy)vinylsilane	6D
1072-63-5	1-vinylimidazole	6D
1085-98-9	Dichlofluanid	3C
1163-19-5	Bis(pentabromophenyl) ether; Decabromodiphenyl ether (DecaBDE)	2K1, 6D
1303-28-2	Diarsenic pentaoxide	6D
1303-86-2	Diboron trioxide	6D
1303-96-4	Disodium tetraborate, anhydrous	6D
1306-19-0	Cadmium oxide	6D
1330-43-4	Disodium tetraborate, anhydrous	6D
1333-82-0	Chromium trioxide	6D
1336-36-3	Polychlorinated biphenyl (PCB)	3D
1344-37-2	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	6D
1478-61-1	Bisphenol AF (BPAF)	2C
1522-92-5	3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)	6D
1582-09-8	Trifluralin	3C
1649-08-7	$C_2H_2F_2Cl_2$	4C
1691-99-2	2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	2N1, 2U, 2W
1694-09-3	Acid Violet 49	2G2
1717-00-6	$C_2H_3FCl_2$	4C
1746-01-6	2,3,7,8-Tetrachlorodibenzo-*p*-dioxin	3A Group 1

CAS Number	Chemical Substance	RSL Section
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2N1, 2U, 2W
1806-26-4	4-Octylphenol	2B
1825-21-4	Pentachloroanisole	3C
1897-45-6	Chlorothalonil	3C
1910-42-5	Paraquat	3C
1937-37-7	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)	2G2, 6D
1996-88-9	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	2N3, 2U, 2W
2058-94-8	Henicosafluoroundecanoic acid (PFUnDA, C11-PFCA)	2N4, 2U, 2W
2077-46-5	2,3,6-Trichlorotoluene	2D1
2354-06-5	$C_3F_3Cl_5$	4B Group 3
2385-85-5	Mirex	3C
2395-00-8	Potassium perfluorooctanoate (PFOA-K)	2N2, 2U, 2W
2425-06-1	Captafol	3C
2437-29-8	Basic Green 4	2G2
2475-45-8	Disperse Blue 1	2G1
2475-46-9	Disperse Blue 3	2G1
2551-62-4	Sulfur hexafluoride - SF_6	4A
2580-56-5	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2G2, 6D
2581-69-3	Disperse Orange 1	2G1
2602-46-2	Direct Blue 6	2G2
2634-33-5	1,2-benzisothiazol- 3(2H)-one	2X
2642-71-9	Azinophosethyl	3C
2682-20-4	2-methylisothiazolin-3(2H)-one	2X
2795-39-3	Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2N1, 2U, 2W
2832-40-8	Disperse Yellow 3	2G1
2837-89-0	C_2HF_4Cl	4C
2872-48-2	Disperse Red 11	2G1
2872-52-8	Disperse Red 1	2G1
3108-24-5	Ethyl perfluorooctanoate (Et-PFOA)	2N3, 2U, 2W
3108-42-7	Ammonium nonadecafluorodecanoate	6D
3165-93-3	4-chloro-o-toluidinium chloride	2A1
3179-89-3	Disperse Red 17	2G1
3179-90-6	Disperse Blue 7	2G1
3182-26-1	$C_3F_2Cl_6$	4B Group 3
3194-55-6	1,2,5,6,9,10-hexabromocyclo-dodecane and its main diastereoisomers	2K1, 6D
3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-*p*-dioxin	3A Group 3
3296-90-0	2,2-Bis(bromomethyl)propane-1,3-diol (BBMP)	2K1, 6D
3424-82-6	*o,p*-Dichlorodiphenyl-dichloroethylene (*o,p*-DDE)	3C

CAS Number	Chemical Substance	RSL Section
3761-53-3	Acid Red 26	2G2
3825-26-1	Perfluorooctanoic ammonium salt, Ammonium pentadecafluorooctanoate (APFO)	2N2, 2U, 2W, 6D
3830-45-3	Sodium nonadecafluorodecanoate	6D
3846-71-7	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	6D
3860-63-7	Disperse Blue 26	2G1
3864-99-1	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	6D
4149-60-4	Ammonium salts of perfluorononan-1-oic-acid	6D
4151-50-2	N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	2N1, 2U, 2W
4234-79-1	Kelevan	3C
4247-02-3	Isobutyl 4-hydroxybenzoate	6D
4259-43-2	$C_3F_5Cl_3$	4B Group 3
4824-78-6	Bromophos-ethyl	3C
4901-51-3	2,3,4,5-Tetrachlorophenol	2D2
5216-25-1	α,α,α,4-Tetrachlorotoluene	2D1
5412-25-9	Bis(2,3-dibromopropyl) phosphate	2K1
5436-43-1	Tetrabromodiphenyl ether (tetraBDE)	2K1
6108-10-7	ε-hexachlorocyclohexane	3C
6164-98-3	Chlordimeform	3C
6250-23-3	Disperse Yellow 23	2G1
6300-37-4	Disperse Yellow 7	2G1
6373-73-5	Disperse Yellow 9	2G1
6639-30-1	2,4,5-Trichlorotoluene	2D1
6786-83-0	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	2G2, 6D
6807-17-6	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6D
6923-22-4	Monocrotophos	3C
7085-19-0	Mecoprop	3C
7125-84-0	$C_3H_2F_3Cl_3$	4C
7439-92-1	Lead (Pb)	2I, 2U, 2V, 6D
7439-97-6	Mercury (Hg)	2I, 2U, 2V
7440-02-0	Nickel (Ni)	2I
7440-36-0	Antimony (Sb)	2I
7440-38-2	Arsenic (As)	2I
7440-39-3	Barium (Ba)	2I
7440-43-9	Cadmium (Cd)	2I, 2U, 2V, 6D
7440-47-3	Chromium (Cr)	2I
7440-48-4	Cobalt (Co)	2I
7440-50-8	Copper (Cu)	2I
7646-79-9	Cobalt dichloride	6D
7738-94-5	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.	6D

CAS Number	Chemical Substance	RSL Section
7758-97-6	Lead chromate	6D
7775-11-3	Sodium chromate	6D
7778-50-9	Potassium dichromate	6D
7782-49-2	Selenium (Se)	2I
7786-34-7	Phosdrin/Mevinphos	3C
7789-00-6	Potassium chromate	6D
7789-09-5	Ammonium dichromate	6D
7789-12-0	Sodium dichromate	6D
7803-57-8	Hydrazine	6D
8001-35-2	Toxaphene	3C
8001-50-1	Strobane	3C
8004-87-3	Basic Violet 1	2G2
8012-00-8	Pyrochlore, antimony lead yellow	6D
9002-86-2	PVC	2U, 2W
10043-35-3	Boric acid	6D
10124-43-3	Cobalt(II) sulphate	6D
10141-05-6	Cobalt(II) dinitrate	6D
10265-92-6	Metamidophos	3C
10309-95-2	Basic Green 4	2G2
10319-14-9	Disperse Yellow 64	2G1
10588-01-9	Sodium dichromate	6D
10606-46-9	o,p'-Dicofol	3C
11103-86-9	Potassium hydroxyoctaoxodizincatedichromate	6D
11113-50-1	Boric acid	6D
12001-29-5	Chrysotile	3B
12008-41-2	Disodium octaborate	6D
12172-73-5	Amosite	3B
12179-04-3	Disodium tetraborate, anhydrous	6D
12222-75-2	Disperse Blue 35	2G1
12222-97-8	Disperse Blue 102	2G1
12223-01-7	Disperse Blue 106	2G1
12223-33-5	Disperse Orange 37/59/76	2G1
12236-29-2	Disperse Yellow 39	2G1
12267-73-1	Tetraboron disodium heptaoxide, hydrate	6D
12656-85-8	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	6D
13301-61-6	Disperse Orange 37/59/76	2G1
13530-68-2	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.	6D
13593-03-8	Quinalphos	3C
13674-84-5	Tris(1-chloro-2-propyl) phosphate (TCPP)	2K1

CAS Number	Chemical Substance	RSL Section
13674-87-8	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2K1
13701-59-2	Barium diboron tetraoxide	6D
13840-56-7	Orthoboric acid, sodium salt	6D
14567-73-8	Tremolite	3B
15571-58-1	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	6D
15950-66-0	2,3,4-Trichlorophenol	2D2
16071-86-6	Direct Brown 95	2G2
18540-29-9	Chromium, Hexavalent Cr(VI)	2I, 2U, 2V
19398-61-9	2,5-Dichlorotoluene	2D1
19408-74-3	1,2,3,7,8,9-Hexachloro-dibenzo-*p*-dioxin	3A Group 2
21041-95-2	Cadmium hydroxide	6D
21049-39-8	Sodium salts of perfluorononan-1-oic-acid	6D
21436-97-5	2,4,5-trimethylaniline hydrochloride	2A1
21564-17-0	2-(Thiocyanomethylthio)benzothiazole (TCMBT)	2Q
22673-19-4	Dibutylbis(pentane-2,4-dionato-O,O')tin	6D
23355-64-8	Disperse Brown 1	2G1
24448-09-7	2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	2N1, 2U, 2W
25155-23-1	Trixylyl phosphate (TXP)	2K1
25637-99-4	Hexabromocyclododecane (HBCDD)	2K1, 6D
25973-55-1	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	6D
26040-51-7	Bis(2-ethylhexyl)-2,3,4,5-tetrabromophthalate (TBPH)	2K2
26172-55-4	5-Chloro-2-methyl- isothiazolin-3(2H)- one	2X
26530-20-1	2-octyl-2H-isothiazol-3-one (OIT)	2Q
26761-40-0	Di-iso-decyl phthalate (DIDP)	2O, 2U, 2W
27905-45-9	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	2N3, 2U, 2W
28553-12-0	Di-iso-nonyl phthalate (DINP)	2O, 2U, 2W
28777-70-0	Tris(4-tert-butylphenyl) phosphate (TBPP)	2K2
29081-56-9	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)	2N1, 2U, 2W
29255-31-0	$C_3F_4Cl_4$	4B Group 3
29457-72-5	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	2N1, 2U, 2W
31218-83-4	Propethamphos	3C
31506-32-8	N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA)	2N1, 2U, 2W
32534-81-9	Pentabromodiphenyl ether (pentaBDE)	2K1
32536-52-0	Octabromodiphenyl ether (octaBDE)	2K1
32768-54-0	2,3-Dichlorotoluene	2D1
33213-65-9	beta-Endosulfan	3C
35822-46-9	1,2,3,4,6,7,8-Heptachloro-dibenzo-*p*-dioxin	3A Group 3
36355-01-8	Hexabromo-1,1'-biphenyl	2K1
36437-37-3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	6D

CAS Number	Chemical Substance	RSL Section
36483-57-5	2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA);	6D
36483-60-0	Hexabromodiphenyl ether (hexaBDE)	2K1
37853-59-1	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene]	6D
38051-10-4	2,2-Bis(Chloromethyl) Trimethylene; Bis[Bis(2-Chloromethyl) phosphate] (V6)	2K2
39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	3A Group 3
39108-34-4	1H,1H,2H,2H -Perfluorodecane sulphonic acid	2N3, 2U, 2W
39156-41-7	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	2A1
39227-28-6	1,2,3,4,7,8-Hexachloro-dibenzo-*p*-dioxin	3A Group 2
40088-47-9	Tetrabromodiphenyl ether (tetraBDE)	2K1
40321-76-4	1,2,3,7,8-Pentachloro-dibenzo-*p*-dioxin	3A Group 1
41198-08-7	Profenophos	3C
49663-84-5	Pentazinc chromate octahydroxide	6D
50585-41-6	2,3,7,8-Tetrabromodibenzo-*p*-dioxin	3A Group 4
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	3A Group 1
51630-58-1	Fenvalerate	3C
51811-42-8	Disperse Orange 37/59/76	2G1
52315-07-8	Cypermethrin	3C
52697-38-8	Disperse Violet 93	2G1
52918-63-5	Deltamethrin	3C
53469-21-9	Polychlorinated biphenyl (PCB)	3D
54077-16-6	Disperse Yellow 56	2G1
54824-37-2	Disperse Yellow 49	2G1
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	3A Group 3
55965-84-9	Reaction mass of: 5-chloro-2- methyl-4- isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)	2X
56524-77-7	Disperse Blue 35	2G1
56548-64-2	Disperse Blue 291	2G1
56773-42-3	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C2H5)4)	2N1, 2U, 2W
56803-37-3	4-(tert-butyl)phenyl diphenyl phosphate (MDPP)	2K2
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	3A Group 1
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	3A Group 2
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	3A Group 2
57648-21-2	Timiperone	3C
57653-85-7	1,2,3,6,7,8-Hexachloro-dibenzo-*p*-dioxin	3A Group 2
59536-65-1	Polybrominated biphenyls (PBB)	2K1, 2V
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	3A Group 2
61788-32-7	Terphenyl hydrogenated	6D
61788-33-8	Polychlorinated terphenyl (PCT)	3D
61951-51-7	Disperse Blue 124	2G1

CAS Number	Chemical Substance	RSL Section
61968-47-6	Disperse Red 151	2G1
63405-99-2	5,7-dichloro-4-(2,4,5-trichlorophenoxy)-2-(trifluoromethyl)-1H-benzimidazole	3C
65652-41-7	di-tert-butylphenyl phenyl phosphate (DBPP)	2K2
65996-93-2	Pitch, coal tar, high temp.	6D
66230-04-4	Esfenvalerate	3C
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	3A Group 3
67933-57-7	2,3,7,8-Tetrabromodibenzofuran	3A Group 4
68359-37-5	Cyfluthrin	3C
68515-42-4	Di-heptyl, nonyl, undecyl phthalate (DHNUP)	2O, 2U, 2W, 6D
68515-48-0	Di-iso-nonyl phthalate (DINP)	2O, 2U, 2W
68515-49-1	Di-iso-decyl phthalate (DIDP)	2O, 2U, 2W
68515-50-4	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	2O, 2U, 2W, 6D
68515-51-5	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters with ≥ 0.3% of dihexyl phthalate	2O, 2U, 2W, 6D
68631-49-2	Hexabromodiphenyl ether (hexaBDE)	2K1
68648-93-1	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters	2O, 2U, 2W, 6D
68928-80-3	Heptabromodiphenyl ether (heptaBDE)	2K1
70225-14-8	Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)	2N1, 2U, 2W
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	3A Group 2
70776-03-3	Polychlorinated naphthalenes	3D
71850-09-4	Di-iso-hexyl phthalate	2O, 2U, 2W, 6D
71868-10-5	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	6D
71888-89-6	Di-iso-heptyl phthalate (DIHP)	2O, 2U, 2W, 6D
72629-94-8	Pentacosafluorotridecanoic acid (PFTrDA, C13-PFCA)	2N4, 2U, 2W
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	3A Group 2
76057-12-0	2,3,4,5-Tetrachlorotoluene	2D1
76253-60-6	Monomethyl-tetrachloro-diphenyl methane	3D
77536-66-4	Actinolite	3B
77536-67-5	Anthophyllite	3B
77536-68-6	Tremolite	3B
81161-70-8	Monomethyl-dichloro-diphenyl methane	3D
84777-06-0	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	2O, 2U, 2W, 6D
84852-53-9	Decabromodiphenyl ethane (DBDPE)	2K1
85136-74-9	Disperse Orange 149	2G1
85535-84-8	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	2K1, 2E, 6D
85535-85-9	Medium chain Chlorinated Paraffins (MCCP) (C14-C17)	2E, 2K, 6D
91465-08-6	Cyhalothrin	3C
99688-47-8	Monomethyl-dibromo-diphenyl methane	3D
107555-93-1	1,2,3,7,8-Pentabromodibenzofuran	3A Group 5
109333-34-8	1,2,3,7,8-Pentabromo-dibenzo-*p*-dioxin	3A Group 4

CAS Number	Chemical Substance	RSL Section
110999-44-5	1,2,3,4,7,8-Hexabromo-dibenzo-*p*-dioxin	3A Group 5
110999-45-6	1,2,3,6,7,8-Hexabromo-dibenzo-*p*-dioxin	3A Group 5
110999-46-7	1,2,3,7,8,9-Hexabromo-dibenzo-*p*-dioxin	3A Group 5
118685-33-9	C39H23ClCrN7O12S.2Na Disodium (6-(4-anisidino)-3-sulfonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)(1-(5-chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-)	2G3
119313-12-1	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	6D
122463-28-9	Disperse Violet 93	2G1
131166-92-2	2,3,4,7,8-Pentabromodibenzofuran	3A Group 4
132207-32-0	Chrysotile	3B
132207-33-1	Crocidolite	3B
134190-50-4	$C_3H_3F_4Cl$	4C
134237-50-6	alpha-hexabromocyclododecane	2K1
134237-51-7	beta-hexabromocyclododecane	2K1
134237-52-8	gamma-hexabromocyclododecane	2K1
138495-42-8	HFC-43-10 mee - $CF_3CHFCHFCF_2CF_3$	4A
143860-04-2	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	6D
183658-27-7	2-Ethylhexyl 2,3,4,5-Tetrabromobenzoate (TBB)	2K2
207122-15-4	Hexabromodiphenyl ether (hexaBDE)	2K1
207122-16-5	Heptabromodiphenyl ether (heptaBDE)	2K1
251099-16-8	1-Decanaminium, N-decyl-N,N-dimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonic acid	2N1, 2U, 2W
255881-94-8	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	6D
268221-71-2	Disperse Violet 93	2G1
446255-22-7	Heptabromodiphenyl ether (heptaBDE)	2K1
776297-69-9	N-pentyl-iso-pentyl phthalate (NPIPP)	2O, 2U, 2W, 6D
Various	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	6D
Various	Tripropyltin (TPT) compounds	2M
Various	Triphenyltin (TPhT) compounds	2M
Various	Trioctyltin (TOT) compounds	2M
Various	Trimethyltin (TMT) compounds	2M
Various	Tricyclohexyltin (TCyHT) compounds	2M
Various	Tributyltin (TBT) compounds	2M
Various	PFHxS salts and related substances	2N6, 2U, 2W
Various	PFHxA salts and related substances	2N6, 2U, 2W
Various	Octylphenol ethoxylate (OPEO)	2B
Various	Octylphenol (OP), mixed isomers	2B
Various	Nonylphenol ethoxylate (NPEO)	2B, 6D
Various	Nonylphenol (NP), mixed isomers	2B
Various	Monobutyltin (MBT) compounds	2M

CAS Number	Chemical Substance	RSL Section
Various	Halogenated terphenyls	3D
Various	Halogenated naphthalenes	3D
Various	Halogenated diarylalkanes	3D
Various	Dioctyltin (DOT) compounds	2M
Various	Dibutyltin (DBT) compounds	2M
Various	4-heptylphenol, branched and linear	6D
Various	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propanoic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	6D
-	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	6D
-	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	6D
-	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	6D
-	C46H30CrN10O20S2.3Na	2G3
-	2-(4-tertbutylbenzyl) propionaldehyde and its individual stereoisomers	6D
-	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	6D
-	Perfluoroheptanoic acid and its salts	6D