

# VOICE

## **Restricted Substances List**

**VOICE Norge AS**

Revision February 2023

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**VOICE Norge AS includes the following chains and brands:**

- VIC (VESBAR, BLU, MELLOWFIELD)
- MATCH MEN (ALVO, MARIO CONTI, REDFORD)
- MATCH WOMEN (DONNA, MARIE PHILIPPE, VA VITE)
- BOYS OF EUROPE (HENRY CHOICE, MR. CAPUCHIN, WOS NOT WOS)
- JEAN PAUL (JEAN PAUL MEN, JEAN PAUL WOMEN)

## **1.0 GENERAL INFORMATION**

VOICE Norge AS' Restricted Substances List consists of four sections: General information – this section, explanatory section, List of Restricted chemicals in products and packaging, and Appendixes for substances in some individual groups of chemicals.

The European Commission published a [chemicals strategy for sustainability](#) towards toxic-free environment on 14 October 2020. It is part of the EU's zero pollution ambition, which is a key commitment of the European Green Deal.

Some of the major objectives of the strategy are:

- Banning the most harmful chemicals in consumer products, only allowing their use where essential
- Boosting the use and production of the chemicals that are safe and sustainable by design, and throughout their life cycle.

The requirements and concentration limits in the restricted substances list are based on EU's legal regulations, Norwegian national legal regulations, and particularly based on those objectives.

Each limit in VOICE Norge AS' Chemical Substances List is valid for homogeneous parts of the concerned product, i.e., [all details of the products](#) must comply with VOICE Norge AS' Restricted Substances List. Individual restricted substances with CAS RN are specified in the Appendixes.

## **2.0 EXPLANATORY SECTION**

Limit value:	Limit value as agreed in business sector and or by legal requirements. Note that the limit value is measured in products. Weight per cent shall be calculated from the weight of the whole product if nothing else is stated.
CAS RN:	Chemical abstract services registration number. CAS RN is given for specific defined substances.
Test method:	Standardised test method if such exists. ISO/EN standards are prioritized over national or commercial standards. Test equipment if no standardized test method exists.
Detection limit (DL):	Limit of detection (LOD). Lowest concentration the test equipment can detect. This can vary between different test laboratories. Note that detection limit is not as relevant as required limit values for all substances as the background concentrations can be notably higher.

Limit of quantification (LOQ): The smallest concentration of an analyte that can be reliably measured by an analytical procedure.

Packaging material: According to Directive (EC) No 94/62/EC of 20 December 1994 on packaging and packaging waste. The directive regulates substances in packaging material, meaning all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.

**Relationship between units used in this document:**

1000 mg/kg equals:                      1000 ppm (parts per million, also expressed as milligrams per litre – mg/L)  
    1 000 000 ppb (parts per billion)  
    1 000 000 µg/kg (microgram per kilogram)  
    0.1% (by weight)  
x µg/m<sup>2</sup>: x depends on the thickness of the fabric (kg/m<sup>2</sup>)  
x µg/cm<sup>2</sup>/week  
x is a measure of the release of a substance from a surface and is only partially dependent on the concentration of the substance.

**Relationship between surface concentration and weight concentration**

- Re-calculate fabric weight into kilograms in square meter (that is, kg/m<sup>2</sup>)
  - For example: 100g/m<sup>2</sup> (gsm) is equal to 0.1kg/m<sup>2</sup>
  - If fabric weight is stated in grams per running meter, it needs to be converted into grams per square meter before re-calculation from grams per square meter into kilograms per square meter.
- Formula to use for converting from surface concentration to weight concentration
  - $\frac{mcg}{m^2} \div \frac{kg}{m^2} = \frac{mcg}{m^2} \times \frac{m^2}{kg} = \frac{mcg}{kg}$ , mcg is microgram (µg) and mcg/kg is equal to ppb.
- Formula to use for converting from weight concentration to surface concentration
  - $\frac{mcg}{kg} \times \frac{kg}{m^2} = \frac{mcg}{m^2}$ , where mcg = µg, and  $\frac{mcg}{kg} = ppb$

**Test equipment abbreviations****Analysis of organic compounds**

- Gas chromatography: GC
  - Detectors used together with GC:
    - MS: Mass selective detector: GC-MS
    - DAD: Diode array detector: GC-DAD
    - ECD: Electron capture detector: GC-ECD
- Liquid chromatography: LC
  - Note: sometimes the abbreviation HPLC is used: High Performance Liquid Chromatography.
  - Detectors used with LC:
    - MS: Mass selective detector: HPLC/LC-MS
    - DAD: Diode array detector: HPLC/LC-DAD
    - ECD: Electron capture detector: HPLC/LC-ECD
    - UV/VIS: Ultraviolet/Visible Spectrophotometric detector: HPLC/LC-UV/VIS

**Analysis of metals:**

- Inductively Coupled Plasma Spectrometry: ICP
  - Detectors together with ICP:
    - OES: Optical emission spectrometer: ICP-OES
    - MS: Mass selective detector: ICP-MS
  - Atomic Absorption Spectrophotometer: AAS

**Screening analysis of elements:**

- X-ray fluorescence: XRF

### 3.0 LIST OF RESTRICTED SUBSTANCES IN TEXTILES, LEATHER/IMITATION LEATHER, ACCESSORIES & PACKAGING

Family of chemical substances:	CAS RN.:	VOICE requirement:	Test methods & Limit of quantification (LOQ)
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#### AP and APEO (NPEO, OPEO)

Alkylphenols (AP), Alkylphenol ethoxylates (APEO) and derivatives, incl Nonylphenol ethoxylates (NPEO) and Octylphenol ethoxylates (OPEO)  
Process chemicals used in textiles and leather/imitation leather

AP & APEO (NPEO, OPEO)	Various – See <a href="#">Appendix A</a>	< 100 mg/kg (0.01% by weight) for total sum of AP & APEO	EN ISO 18254 (textile) APEO; EN ISO 21084 (textile) AP; EN ISO 18218 (leather) LOQ: 10 mg/kg
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#### Biocidal agents

Biocides, fungicides and insecticide are used both as process chemicals and as product related chemicals in textiles, leather/imitation leather, accessories and packaging materials.

##### Bactericides

Used in textiles and leather.

Silver (Ag) and its compounds	Various CAS RN – See <a href="#">Appendix F</a> 7440-22-4 (metal)	Not Detected	No standard test method available. Test equipment: ICP-MS, ICP-OES or AAS. LOQ: 10 mg/kg
Triclosan and Triclocarban OPP – 2-phenylphenol	3380-34-5 (Triclosan) 101-20-2 (Triclocarban) Both are banned in PT9 (textiles, leather & polymers) 90-43-7 (OPP)	Not Detected	EN 17134 (textile) ISO 22992-2 (textile) Test equipment: GC-MS, LC-MS. LOQ: 10 mg/kg (OPP & triclosan in textile materials)
Trisubstituted tin organic compounds	Various CAS RN – See <a href="#">Appendix F</a>	Not Detected	EN ISO 22744 (textile) CEN ISO/TS 16179 (footwear) Test equipment: GC, LC, GC-MS. EN ISO 17353 (water and sediment) LOQ: 0.2 mg/kg
Zincpyrithion	13463-41-7	Not Detected	No standard test method available. Test equipment: GC-MS, LC-MS. LOQ: 1000 mg/kg (100 mg/kg via Zinc)

##### Biocides

Used in textiles and leather.

<b>Glutaral</b>	111-30-8 SVHC	Not Detected	No standardized test method available. Test equipment: LC-UV, GC-UV LOQ: -
<b>Guanidine</b> , N,N''''-1,6-hexanediybis[N'-cyano-, polymer with 1,6-hexanediamine, hydrochloride ( <b>PHMB 1600</b> ; 1.8)	27083-27-8, 32289-58-0 Banned in PT9 (textiles, leather & polymers) – Biocidal Product Regulation (EU 528/2012)	Not Detected	No standard test method available. Test equipment: LC-MS LOQ: -

##### Fungicides and pesticides– used in materials for storage and transport

Used in textiles and leather.

<b>Cu-HDO</b> – Bis-(N-cyclohexyldiazoniumdioxy)-copper	312600-89-8 Banned in PT9 (textiles, leather & polymers)	Not Detected	No standard test method available. Test equipment: ICP-AES LOQ: 50 mg/kg
<b>DMFu</b> – Dimethylfumarate	624-49-7	Not Detected	SS-EN 17130 (textile & textile material) EN ISO 16186 (footwear) Test equipment: GC-MS, LC-MS LOQ: 0.1 mg/kg.
<b>Parabens</b> – Butyl 4-hydroxybenzoate (Butylparaben); Isobutyl 4-hydroxybenzoate	94-26-8 SVHC 4247-02-3 SVHC	Not Detected	No standardized test method for textiles and leather Test equipment: GC-MS, LC-MS LOQ: 100 mg/kg
<b>PCP</b> and all isomers of <b>TeCP</b> – Pentachlorophenol (PCP) Tetrachlorophenols (TeCP)	87-86-5 (PCP), 131-52-2 (PCP sodium salt), 935-95-5, 4901,51-3, 58-90-2 (isomers of TeCP) PCP and its salts & esters are banned in Norway in textiles and leather.	Not Detected	ISO 17070 (leather) EN ISO 22517 (pesticide residues in leather products) XP G 08-015 (French standard method for PCP in textiles).

<b>Other chlorophenols &amp; biocidal agents</b>	Various CAS RN – See <a href="#">Appendix F</a>	Not Detected	LOQ: 0.1 mg/kg CEN/TR 14823 (wood). Detection limit 25 mg/kg EN ISO 15320 (Pulp, paper and board)
<b>Insecticides</b> Used in textile and leather.			
Permethrin	52645-53-1	Not Detected	No standard test method available for textiles. EN ISO 22517 (pesticide residues in leather) Test equipment: GC-MS, LC-MS. LOQ: 5 mg/kg

<b>Bisphenols</b> Process chemicals used in accessories and packaging – hardener, production of PC epoxy resin, thermal prints, etc. BPA content $\geq 0.02\%$ by weight (200 mg/kg) in thermal paper, is restricted in REACH Annex XVII, Entry 66.			
2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6 SVHC	Not Detected	Textile: No standard test method available Leather: pr ISO 11936 Test equipment LC-MS, GC-MS LOQ: 10 mg/kg each
<b>BPA</b> , Bisphenol A (4,4'-isopropylidenediphenol)	80-05-7 SVHC		
<b>BPB</b> , Bisphenol B (4,4'-(1-methylpropylidene)bisphenol)	77-40-7 SVHC		
<b>BPS</b> , Bisphenol S (4,4'-sulphonyldiphenol)	80-09-1 SVHC		

<b>Blowing Agents/Foaming agents</b> Process chemicals. ADCA used in accessories as blowing agent in production of rubber, plastics, EVA, PVC, etc. Hydrazine is also blowing agent in production of polymer foams in accessories and packaging.			
<b>ADCA</b> (C,C'-azodi(formamide)); Azodicarbonamide; Azodiformamide	123-77-3 SVHC	Not Detected	No standard test method available for textiles. Test equipment: GC-MS LOQ: 200 mg/kg
<b>Hydrazine</b>	302-01-2, 7803-57-8 Both are listed in SVHC list	Not Detected	No standard test method available for textiles. Test equipment: UV-VIS Spectrometer (LOQ: -- ) Test equipment: GC-MS (LOQ: 200 mg/kg)

<b>Color dyes and pigments</b>			
<b>Allergenic dyes</b> Product related chemicals used in textiles and imitation leather – dyeing of synthetic fibers and blended fibers. Those disperse dyes are mainly used in polyester, acetate, polyamide.			
Allergenic disperse dyes	Various – See <a href="#">Appendix E</a>	Not Detected	EN ISO 16373 (extractable dyestuff). LOQ: 50 mg/kg each
<b>Azo dyes and colorants which by reductive cleavage, may release one or more arylamines</b> Product related chemicals used in textiles, leather/imitation leather, accessories and packaging. Azo dyes and pigments are colorants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those which degrade to form listed amines are restricted.			
Banned arylamines related to azo dyes	Various – See <a href="#">Appendix C</a>	Not Detected	Textile: EN ISO 14362-1/-3 Leather: EN ISO 17234-1/2 (Methods specified in REACH Annex XVII, Appendix 10) LOQ: 20 mg/kg (per each of the arylamine breakdown products)
<b>Carcinogenic dyestuffs</b> Product related chemicals used in textiles, leather/imitation leather, accessories and packaging.			
<b>CMR</b> – Carcinogenic, Mutagenic, Reproductive toxic dyestuffs	Various CAS RN – See <a href="#">Appendix D</a>	Not Detected	EN ISO 16373 (extractable dyestuffs) LOQ: 50 mg/kg

<b>EDA – Ethylene diamine</b> Process chemicals used in imitation leather and accessories – production of PU fibers, etc.			
<b>EDA</b> (Ethylene diamine)	107-15-3 SVHC	Not Detected	No standard test method available.

			Test equipment: GC-MS, LC-MS LOQ: 100 mg/kg
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### Ethylene thiourea

Process chemicals used in accessories – production of rubber, etc.

Ethylene thiourea; Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7 SVHC	Not Detected	No standard test method available. Test equipment: LC-MS LOQ: 20 mg/kg
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### Flame retardants

#### Flame retardants in plastics

Product-related chemicals used in textiles, leather, accessories and packaging. Chloroparaffins are used as flame retardant and plasticizers in plastic and rubber materials, in coated synthetic/fake leather, and as fat liquoring agent in leather production. Dechlorane™ Plus is another flame retardant for plastics, is also used in adhesives, sealants and in binding agents.

LCCP (C18-) - Long-chain Chloroparaffins	85535-86-0	Not Detected	EN ISO 22818 (textiles) ISO 18219 (leather). Test equipment: GC-MS or LC-MS or GC-NCI-MS (Organic solvent extraction for textile) LOQ: 100 mg/kg (textiles)
MCCP (C14-C17) - Medium-chain Chloroparaffins	85535-85-9, 198840-65-2, 1372804-76-6 All CAS RNs are listed in SVHC list		
SCCP (C10-C13) - Short-chain Chloroparaffins	85535-84-8 SVHC/POP		
Dechlorane™ Plus (1,6,7,8,9,14,15,16,17,18,18 Dodecachloropentacyclo[12.2.1.1.16,9.02,13.05,10]octadeca-7,15-diene)	13560-89-9, 135821-74-8, 135821-03-3 All CAS RNs are listed in SVHC list	Not Detected	No standardized test method available. Test equipment: GC-MS, LC-MS, GC-ECD, (XRF to detect chlorine). LOQ: 100 mg/kg

#### Other Flame retardants

Product related chemicals used in textiles, leather/imitation leather, accessories and packaging. Boric acid, borate compounds are used in packaging. HBCD/HBCDD are used in textiles and packaging, PBB, PBDE, TBPP and TCEP are used widely in textiles, leather/imitation leather, accessories and packaging. Trixylyl phosphate is mainly used in accessories and packaging, and it is also a plasticizer in production of PU and PVC.

Boric acid, borate compounds	Various – See <a href="#">Appendix G</a>	Not Detected	Test equipment: AAS, ICP-MS and ICP-OES LOQ: 25 mg/kg (for each), 10 mg/kg for total Boron content)
HBCD, HBCDD – Hexabromocyclododecane	Various – See <a href="#">Appendix G</a>	Not Detected	EN ISO 17881-1 (textiles). Test equipment: GC-MS, LC-MS, GC-ECD LOQ: 20 mg/kg
TBPH – Bis(2-ethylhexyl) tetrabromophthalate	26040-51-7 SVHC	Not Detected	No standardized test method Test equipment: GC-MS, LC-MS, GC-ECD, XRF to detect bromine) LOQ: 100 mg/kg
PBB & PBDE – Polybrominated biphenyls & Polybrominated diphenyl ethers – used in textiles, leather/imitation leather, accessories and packaging	Various – See <a href="#">Appendix G</a>	Not Detected	EN ISO 17881-1 (textiles) EN 16377 for PBB (plastics) Test equipment: GC-MS, LC-MS, GC-ECD. LOQ: 10 mg/kg
TBPP, TCEP, TCPP, TDCPP – Tris(2,3-dibromopropyl) phosphate, Tris(2-chlorethyl) phosphate, tris(1-chloro-2-propyl) phosphate, Tris(1,3-dichloro-2-propyl) phosphate	TBPP: 126-72-7 (banned > 5mg/kg Annex XVII, entry 4), TCEP: 115-96-8 SVHC TCPP: 13674-84-5 TDCPP: 13674-87-8	Not Detected	EN ISO 17881-2 (textiles) Test equipment for other materials: GC-MS, LC-MS, GC-ECD LOQ: 5 mg/kg
Trixylyl phosphate Triphenyl phosphate TEPA – tris(aziridinyl) phosphin oxide Iso-propylated phenyl phosphate (3:1)	25155-23-1 SVHC 115-86-6 545-55-1 68937-41-7 SVHC	Not Detected	EN ISO 17881-2 (textiles) Test equipment for other materials: GC-MS, LC-MS, GC-ECD LOQ: 5 mg/kg

### Formaldehyde

Product related chemical in textiles, leather/imitation leather, packaging. Used in shrinkage/wrinkle-resistant treatment, oil/dirt/water-repellent treatment, used as dye-fixing agent, and as preservative in packaging. In tanning process of synthetic leather, may also release formaldehyde.

Formaldehyde	50-00-0 CMR Fast Track	< 20 mg/kg (children < 2 year); < 75 mg/kg all other textiles	Textiles: EN ISO 14184 Leather:
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			ISO 17226-1 (HPLC analysis) ISO 17226-2 (Colorimetric analysis) ISO 17226-3 (VOC analysis) ISO 27587 (Process auxiliaries) LOQ: 16 mg/kg
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### Melamine

Can be found as melamine formaldehyde polymers in leather tanning agents. Can also be used as cross-linker in crease-resistant finishing agents for cellulosic fabrics (MMCF). Used also as melamine derivatives in water repellent finishing. As blowing agent in flame retardants for textile coatings and PU foams.

Melamine	108-78-1 SVHC	Not Detected	No standardized test method Test equipment: LC-MS, GC-MS
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### Metals

Heavy metals (extractable and total content) and their compounds/salts

Metals and their compounds/salts are used in textiles, leather/imitation leather, accessories and packaging. See Appendix for more details.

The total concentration of Pb, Cd, Hg, and Cr+6 in packaging or in packaging components shall not exceed 100 mg/kg. Directive (EC) No 94/62/EC of 20 December 1994 on packaging and packaging waste.

Arsenic (As) & its compounds	Various – See <a href="#">Appendix M</a> 7440-38-2 (metal)	Not Detected	Textiles: EN 16711-1 (total content), EN 16711-2 (extractable content) Leather: EN ISO 17072-1 (extractable content), EN ISO 17072-2 (total content) LOQ: 0.1 mg/kg (extractable) for As, Cd, Pb LOQ: 0.5 mg/kg (extractable) for Cr. LOQ: 0.02 mg/kg (extractable) for Hg LOQ: 10 mg/kg (total content) Test equipment for metal Cd, Cr, Pb: XRF screening LOQ: 50 mg/kg
Cadmium (Cd) & its salts	Various – See <a href="#">Appendix M</a> 7440-43-9 (metal)	Not Detected	
Chromium (Cr) and its compounds	Various 7440-47-3 (metal)	< 2 mg/kg (Extractable) for textiles	
Lead (Pb) and its salts	Various – See <a href="#">Appendix M</a> 7439-92-1 (metal)	Not Detected in textiles. < 100 mg/kg for metal in plastics and metallic accessories.	
Mercury (Hg) and its compounds	Various – See <a href="#">Appendix M</a> 7439-97-6 (metal)	Not Detected	
Chromium VI (Cr+6)	18540-29-9, See <a href="#">Appendix N</a>	Not Detected	ISO 17075 (leather) EN ISO 10195 (pre-aged leather) No standard test method for textiles Test equipment: UV-VIS Spectrometer LOQ: 0.5 mg/kg Test equipment for metal chromium: XRF screening LOQ: 50 mg/kg
Nickel (Ni) – in accessories	7440-02-0 (metal)	< 0,5 µg / cm <sup>2</sup> / week (microgram per sq.cm per week) for prolonged skin contact.	Coated items: EN 12472:2020+A1:2009 and EN 1811:2011+A1:2015 Non-coated items: EN 1811:2011+A1:2015 (CEN methods specified in REACH Annex XVII, entry 27) LOQ: 0.02 µg/cm <sup>2</sup> /week

### PAH – Polycyclic aromatic hydrocarbons

Process chemicals used in leather/imitation leather and accessories – intermediaries of thermosetting plastics, lubricates, impurities from production of rubber, leather, etc.

PAHs – Polycyclic Aromatic Hydrocarbons	Various – See <a href="#">Appendix L</a>	Not Detected	Textile: EN 17132 Leather & Accessories: AfPS GS 2019-01 PAK Footwear: CEN ISO/TS 16190 LOQ: 0.2 mg/kg
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### PFAS/PFCs (PFOA, PFOS, PFPE)

**PFOA** and its related substances (PFCA – highly fluorinated carboxylic acids), **PFOS** and its related substances (PFSA – highly fluorinated sulfonic acids), **PFPE** – Highly fluorinated ethers, are used in textiles and leather/imitation leather. PFOA/PFOS-related substances are used in water/oil repellent textile finishes, impregnation agents in leather, also used as emulsifier in the production of fluoropolymers (PTFE – polytetrafluoroethylene).

<b>PFAS</b> – Per- and polyfluoroalkyl substances	Various – See <a href="#">Appendix K</a>	Not Detected	Textiles: EN 17681-1/-2 Leather/Furs: EN ISO 23702-1 Footwear: prEN ISO 24640 Test equipment: LC-MS, HPLC-tandem MS, HPLC-quadrupole MS LOQ: 1 µg/m <sup>2</sup> (microgram per square meter) or 10 µg/kg (pbb) (PFOA) LOQ: 0.1 µg/m <sup>2</sup> (PFOS) LOQ: -- (PFPE)
<b>PFOA</b> – (part of) Highly fluorinated carboxylic acids ( <b>PFCA</b> )	Various – See <a href="#">Appendix K</a> Such as 335-67-1		
<b>PFOS</b> – (part of) Highly fluorinated sulfonic acids ( <b>PFSA</b> )	Various – See <a href="#">Appendix K</a> Such as 1763-23-1, 335-46-4		
<b>PFPE</b> – Highly fluorinated ethers	Various – See <a href="#">Appendix K</a> Such as 13252-13-6		

#### Phthalate ester

Used in textiles, leather/imitation leather, accessories and packaging. Used as plasticizers in polymers, additives in adhesives, paints, lacquers, varnishes and solvents.

Phthalate esters	Various – See <a href="#">Appendix J</a>	< 1000 mg/kg (0.1% by weight) for total sum of all phthalate esters	EN ISO 14389 (textile) CEN ISO/TS 16181 (footwear) Test equipment: GC-MS, LC-MS LOQ: 100 mg/kg
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#### pH Value

If pH value is above 10 or below 3 can cause skin irritation. The pH value can be corrected by washing

pH value for textiles	Plant/Cellulosic fibers	4.0 – 8.5	Textile: EN ISO 3071 Leather: EN ISO 4045 Accuracy: 0.2 pH units
pH value for textiles	Animal/Natural fibers	3.5 – 7.0	
pH value for leather	Leather products	3.5 – 7.0	

#### Hydroxymethyl acrylamide

Used as monomer in textiles, leather, accessories, and in packaging. Can also be found in adhesives as binders, in sizing agents as resins. In textiles it mainly used as finishing agents for crease-resistant and anti-static properties.

Hydroxymethyl acrylamide	924-42-5 SVHC	Not Detected	Textile: No standardized test method  Test equipment: LC-MS, GC-MS LOQ: 500 mg/kg
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#### Quinoline

Process chemicals used in textiles – in production of rubber, dyes, etc., mainly found in disperse and vat dyes.

Quinoline	91-22-5 CMR fast track	Not Detected	No standard test method available for textiles or leather. Test equipment: GC-MS, LC-MS. LOQ: 10 mg/kg
Isoquinoline	119-65-3		

#### Siloxanes – Silicone related

Chemicals used in textiles, leather/imitation leather, accessories and packaging. In washing & cleaning products, in textile treatment products and dyes. As precursors in the production of polymers such as silicone rubbers.

<b>D4</b> Octamethylcyclotetrasiloxane	556-67-2 SVHC	< 1000 mg/kg (0.1% by weight)	No standard test methods. Test equipment: GC-MS. LOQ: 100 mg/kg
<b>D5</b> Decamethylcyclopentasiloxane	541-02-06 SVHC		
<b>D6</b> Dodecamethylcyclohexasiloxane	540-97-6 SVHC		

#### Solvents

**(Incl Aliphatic Organic Solvents, Aromatic Organic Solvents, Chlorinated Organic Solvents/Carriers)**

Process Chemicals used in textiles, leathers/imitation leathers – solvents, finishing agents, softeners, in dyeing, printing, stain removal, coating, binders, etc. Chlorobenzenes and Chlorotoluenes can be used as carriers in the dyeing process of synthetic or blended fibers but are not recommended for dyeing in high-pressure machinery.

Formamide used as solvent and/or plasticizer in production of synthetic leather & inks, in consumer products.

2-methoxyethyl acetate	110-49-6 SVHC	Not Detected	No standard test method available. Solvent extraction. Test equipment: GC-MS or LC-MS LOQ: 100 mg/kg
Formamide	75-12-7 SVHC	Not Detected	No standard test method available. Solvent extraction. Test equipment: GC-MS or LC-MS LOQ: 50 mg/kg
Chlorinated Organic Solvents – partially used as carriers in dyeing process of synthetic fibers and blended fibers	Various – See <a href="#">Appendix B</a>	Not Detected	No standard quantitative test method available. Solvent extraction. Test equipment: GC-MS, HS-GC-MS, GC-ECD EN 17137 for chlorobenzenes and chlorotoluenes. LOQ 0.5 mg/kg

**Other Solvents (VOCs, Benzene, DMFa, DMAC, NMP, NEP)**

Process chemicals used in textiles, leather, accessories and packaging – solvent in coating process, production of PU, plastics, glue/adhesives, and rubber, etc.

<b>VOCs</b> (Volatile organic compounds)	Various – See <a href="#">Appendix H</a>	< 500 mg/kg each, report concentration above LOQ value < 5 mg/kg (benzene only)	For general VOC screening: GC-MS Headspace 45 minutes at 120 degrees C Test equipment: HS-GC-MS LOQ: 50 mg/kg LOQ: 1 mg/kg (benzene only)
<b>Benzene</b>	71-43-2 CMR fast track	< 5 mg/kg	In-house with ref to EN17137 (textile) LOQ: 1mg/kg
<b>DMFa</b> (N,N-dimethylformamide)	68-12-2 SVHC/CMR fast track	< 500 mg/kg for sum of DMFa, DMAC, NMP and NEP	EN 17131 (textile) CEN ISO/TS 16189 (footwear and footwear components) EN 16778 (protective gloves) Test equipment: GC-MS LOQ: 10 mg/kg
<b>DMAC</b> (N,N-dimethylacetamide)	127-19-5 SVHC/ CMR fast track		No standard quantitative test method for textiles. Test equipment: GC-MS, LC-MS LOQ: 10mg/kg
<b>NMP</b> (N-methyl-2-pyrrolidone)	872-50-4 SVHC/CMR fast track		No standard quantitative test method for textiles. NMP: EN ISO 19070 (leather) Test equipment: GC-MS, LC-MS LOQ: 25mg/kg
<b>NEP</b> (1-ethylpyrrolidin-2-one)	2687-91-4 CMR fast track		

**Tin organic compounds (Organostannic compounds)**

Process chemicals used in textiles, leather, accessories and packaging, stabilizers, catalysts in production of PVC, PU.

<b>Tin organic compounds</b> (Organostannic compounds)	Various – See <a href="#">Appendix I</a>	Not Detected	EN ISO 22744 (textile) Test equipment: GC, LC CEN ISO/TS 16179 (footwear). Test equipment: GC-MS. LOQ: 0.2 mg/kg
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**UV stabilizers**

Product related chemicals used in textiles, leather/imitation leather, accessories, and packaging. UV-stabilizer for plastics, polymeric materials, PU and rubber, and constituent in formulations used for coating of surfaces, also used in dry-cleaning equipment. The substances are categorized as very persistent, very bio-accumulative and toxic (i.e. vPvB, PBT)

<b>UV-320</b> (2-benzotriazol-2-yl-4,6-di-tert-butylphenol)	3846-71-7 SVHC	Not Detected	ISO 24040:2022 (benzotriazoles) Test equipment: GC-MS, LC-MS, GC-ECD LOQ: 50 mg/kg
<b>UV-327</b> (2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol)	3864-99-1 SVHC		
<b>UV-328</b> (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol)	25973-55-1 SVHC		
<b>UV-350</b> (2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol)	36437-37-3 SVHC		
<b>3-BC</b> (1,7,7-trimethyl-3-(phenyl methylene) bicyclol [2.2.1] heptan-2-one); <b>3-benzylidene camphor</b>	15087-24-8 SVHC	Not Detected	No standard test method available. Test equipment: LC-MS, GC-MS LOQ: 100 mg/kg
<b>DBMC</b> (6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol)	119-47-1 SVHC	Not Detected	No Standardized test method available Test equipment: LC and GC-MS LOQ: 100 mg/kg

#### 4.0 APPENDIXES – LISTS OF SUBSTANCES IN SOME INDIVIDUAL GROUPS OF CHEMICALS

Appendix A – AP & APEO	CAS RN
* = SVHC List; **=Restricted under REACH XVII, 46a	
4-(1,1,3,3-tetramethylbutyl) phenol ( <b>4-tert-OP</b> )	140-66-9*
4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated ( <b>4-tert-OPnEO</b> , UVCB substance)	- *
4-Nonylphenol, branched and linear ( <b>4-NP</b> )	Various *
4-Nonylphenol, branched and linear, ethoxylated ( <b>4-NPnEO</b> )	Various *
4-tert-butylphenol	98-54-4*
Nonylphenol ( <b>NP</b> )	Various
Nonylphenol Ethoxylates ( <b>NPEO</b> )	Various
Octylphenol ( <b>OP</b> )	Various
Octylphenol Ethoxylates ( <b>OPEO</b> )	Various
<b>PDDP</b> : Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerization, covering any individual isomers and/ or combinations thereof	- *
Tris (4-nonylphenyl, branched and linear) phosphate ( <b>TNPP</b> ) with = 0.1% w/w of 4-nonylphenol, branched and linear ( <b>4-NP</b> )	- *
Isononylphenol, ethoxylated / Poly (oxy-1,2-ethanediyl), alpha-(isononylphenyl)-... ((C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>15</sub> H <sub>24</sub> O)	37205-87-1**
Nonylphenol, ethoxylated / Poly (oxy-1,2-ethanediyl), alpha-(nonylphenyl)-ome... ((C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>15</sub> H <sub>24</sub> O)	9016-45-9**
4-Nonylphenol, branched, ethoxylated; 1 - 2.5 moles ethoxylated / Poly (oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-o... ((C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>15</sub> H <sub>24</sub> O)	127087-87-0**
Nonylphenol, branched, ethoxylated; 1 - 2.5 moles ethoxylated; Poly (oxy-1,2-ethanediyl), alpha-(nonylphenyl)-ome... ((C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>15</sub> H <sub>24</sub> O)	68412-54-4**
4-Nonylphenol, ethoxylated; 1 - 2.5 moles ethoxylated; Poly (oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-o... ((C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> C <sub>15</sub> H <sub>24</sub> O)	26027-38-3**

Appendix B – ORGANIC SOLVENTS (Aliphatic, Aromatic, Chlorinated)	CAS RN
<b>Chlorinated Organic Compounds/Carriers (Chlorotoluenes, Chlorobenzenes)</b>	
Chlorobenzenes and chlorotoluenes can be used as carriers in dyeing process of synthetic or blended fibres. Those are also used as solvents (* = SVHC list, ** = CMR fast track, # = Annex XVII, α = deplete ozone layer)	
Monochlorobenzene	108-90-7
Dichlorobenzenes, all isomers	Various
Dichlorobenzene: 1,2-Dichlorobenzene (1,2 DCB)	90-50-1
Dichlorobenzene: 1,2-Dichlorobenzene-D4	2199-69-1
Dichlorobenzene: 1,3-Dichlorobenzene (1,3 DCB)	541-73-1
Dichlorobenzene: 1,4-Dichlorobenzene (1,4 DCB)	106-46-7 #
Trichlorobenzenes, all isomers	Various
Trichlorobenzene: 1,2,3-Trichlorobenzene (1,2,3 TCB)	87-61-6
Trichlorobenzene: 1,2,4-Trichlorobenzene (1,2,4 TCB)	120-82-1
Trichlorobenzene: 1,3,5-Trichlorobenzene (1,3,5 TCB)	108-70-3
Tetrachlorobenzenes, all isomers	Various
Tetrachlorobenzene: 1,2,3,4-Tetrachlorobenzene (1,2,3,4 TeCB)	634-66-2
Tetrachlorobenzene: 1,2,3,5-Tetrachlorobenzene (1,2,3,5 TeCB)	634-90-2
Tetrachlorobenzene: 1,2,4,5-Tetrachlorobenzene (1,2,4,5 TeCB)	95-94-3
Pentachlorobenzene (1,2,3,4,5-Pentachlorobenzene)	608-93-5
Hexachlorobenzene (1,2,3,4,5,6-Hexachlorobenzene)	118-74-1
Monochlorotoluenes, all isomers	Various
Monochlorotoluene: 2-Chlorotoluene (2 CT)	95-49-8
Monochlorotoluene: 3-Chlorotoluene (3 CT)	108-41-8
Monochlorotoluene: 4-Chlorotoluene (4 CT)	106-43-4
Monochlorotoluene: Benzyl Chloride / α-chlorotoluene	100-44-7**/ #
Dichlorotoluenes, all isomers	Various
Dichlorotoluene: 2,3-Dichlorotoluene (2,3 DCT)	32768-54-0
Dichlorotoluene: 2,4-Dichlorotoluene (2,4 DCT)	95-73-8
Dichlorotoluene: 2,5-Dichlorotoluene (2,5 DCT)	19398-61-9
Dichlorotoluene: 2,6-Dichlorotoluene (2,6 DCT)	118-69-4
Dichlorotoluene: 3,4-Dichlorotoluene (3,4 DCT)	95-75-0
Dichlorotoluene: 3,5-Dichlorotoluene (3,5 DCT)	25186-47-4
Dichlorotoluene: α,α-Dichlorotoluene / Benzal chloride / (DICHLOROMETHYL)BENZENE	98-87-3
Dichlorotoluene: α,o-Dichlorotoluene / o-Chlorobenzyl chloride	611-19-8
Dichlorotoluene: α,p-Dichlorotoluene / p-Chlorobenzyl chloride	104-83-6
Trichlorotoluenes, all isomers	Various

Trichlorotoluene: 2,3,4-Trichlorotoluene (2,3,4 TCT)	7359-72-0
Trichlorotoluene: 2,3,6-Trichlorotoluene (2,3,6 TCT)	2077-46-5
Trichlorotoluene: 2,4,5-Trichlorotoluene (2,4,5 TCT)	6639-30-1
Trichlorotoluene: 2,4,6-Trichlorotoluene (2,4,6 TCT)	23749-65-7
Trichlorotoluene: 3,4,5-Trichlorotoluene (3,4,5 TCT)	21472-86-6
Trichlorotoluene: a,2,6-Trichlorotoluene	2014-83-7
Trichlorotoluene: Benzotrichloride / a,a,a-Trichlorotoluene	98-07-7**/ #
Tetrachlorotoluenes, all isomers	Various
Tetrachlorotoluene: 2,3,4,5-Tetrachlorotoluene (2,3,4,5 TeCT)	76057-12-0
Tetrachlorotoluene: 2,3,4,6-Tetrachlorotoluene (2,3,4,6 TeCT)	875-40-1
Tetrachlorotoluene: 2,3,5,6-Tetrachlorotoluene (2,3,5,6 TeCT)	1006-31-1
Tetrachlorotoluene: a,a,2,6-Tetrachlorotoluene	81-19-6
Tetrachlorotoluene: p-chlorobenzotrichloride / a,a,a,4-Tetrachlorotoluene	5216-25-1**/ #
Pentachlorotoluene (2,3,4,5,6-Pentachlorotoluene)	877-11-2
<b>Other Chlorinated Organic Solvents</b>	
(* = SVHC list, # = Annex XIV or XVII)	
Tetrachloroethylene (Perchloroethylene) (PERC)	127-18-4
Carbon tetrachloride/ tetrachloromethane	56-23-5 #
1,1,1,2-Tetrachloroethane	630-20-6 #
1,1,1-Trichloroethane	71-55-6 #
1,1-Dichloroethane	75-35-4 #
Pentachloroethane	76-01-7 #
1,1,2-Trichloroethane	79-00-5 #
Trichloroethylene (TCE)	79-01-6*/ #
1,1,2,2-Tetrachloroethane	79-34-5 #
1,2,3-trichloropropane	96-18-4*
Chloronaphthalenes	Various
Chloroform	67-66-3 #
* = SVHC List, ** = CMR fast track, # = Annex XVI or XVII	

Appendix C - BANNED ARYLAMINES RELATED TO AZO DYES	CAS RN
* = SVHC list, ** = CMR fast track, # = Annex XVII entry 43	
2,4,5-trimethylaniline	137-17-7 /#
2,4,5-trimethylaniline hydrochloride	21436-97-5**
2,4-diaminoanisole sulphate	39156-41-7**
2,4-xylydine	95-68-1
2,6-xylydine	87-62-7
2-Naphthylamine	91-59-8 /#
2-Naphthylammoniumacetate	553-00-4**
3,3'-Dichlorobenzidine	91-94-1 /#
4,4'-bi-o-toluidine (3,3'-dimethylbenzidine)	119-93-7 /#
4,4'-Methylenebis(2-chloroaniline)	101-14-4*/#
4,4'-Methylene-dianiline (4,4'-Diaminodiphenylmethane) (MDA)	101-77-9*/#
4,4'-Methylenedi-o-toluidine (3,3'-Dimethyl-4,4'-diaminodiphenylmethane)	838-88-0* /#
4,4'-oxydianiline	101-80-4* /#
4,4'-thiodianiline	139-65-1 /#
4-Aminoazobenzene (p-Aminoazobenzene) 4-AAB (p-AAB), C.I. Solvent Yellow 1	60-09-3* /#
4-chloroaniline (p-Chloroaniline)	106-47-8 /#
4-Chloro-o-toluidine	95-69-2 /#
4-chloro-o-toluidinium chloride	3165-93-3**
4-methoxy-m-phenylenediamine (2,4-Diaminoanisole)	615-05-4 /#
4-methyl-m-phenylenediamine (2,4-Toluenediamine) (TDA - 2,4-toluylen-diamine)	95-80-7* /#
5-Nitro-o-toluidine (2-Amino-4-nitrotoluene)	99-55-8 /#
Benzidine	92-87-5 /#
Biphenyl-4-ylamine (4-Aminodiphenyl)	92-67-1*/#
o-Aminoazotoluene; C.I. Solvent Yellow 3	97-56-3* /#
o-Anisidine	90-04-0* /#
o-Dianisidine (3,3'-Dimethoxybenzidine)	119-90-4 /#
o-Toluidine	95-53-4* /#
p-Cresidine	120-71-8* /#
* = SVHC List, ** = CMR fast track (A17e72), # = Annex XVII entry 43	

Appendix D - CARCINOGENIC DYESTUFFS / CMR Toxic dyestuffs	CAS RN
* = SVHC List, ** = CMR fast track	
C.I. Solvent Violet 8 (4,4'-bis(dimethylamino)-4'-(methylamino)trityl alcohol)	561-41-1*
Acetic acid, lead salt, basic	51404-69-4*/**

C.I. Acid Red 114	6459-94-5
C.I. Acid Red 26	3761-53-3
C.I. Acid Red 73	5413-75-2
C.I. Acid Violet 49	1694-09-3
C.I. Basic Blue 26	2580-56-5*
C.I. Basic green 4	569-64-2
C.I. Basic Red 9	569-61-9**
C.I. Basic Violet 1	8004-87-3
C.I. Basic Violet 14	632-99-5
C.I. Basic Violet 3	548-62-9**/**
C.I. Direct Black 38	1937-37-7*
C.I. Direct Blue 1	2610-05-1
C.I. Direct blue 15	2429-74-5
C.I. Direct Blue 53	314-13-6
C.I. Direct Blue 6	2602-46-2
C.I. Direct Brown 6	2893-80-3
C.I. Direct Brown 95	16071-86-6
C.I. Direct Green 6	4335-09-5
C.I. Direct orange 31	6420-03-7
C.I. Direct Red 28	573-58-0*
C.I. Disperse Blue 1	2475-45-8**
C.I. Disperse Orange 11	82-28-0
C.I. Disperse Orange 149	85136-74-9
C.I. Disperse Yellow 3	2832-40-8
C.I. Solvent Blue 4	6786-83-0*
C.I. Solvent Yellow 2	60-11-7
Michler's base	101-61-1*
* = SVHC List, ** = CMR fast track	

Appendix E - ALLERGENIC DISPERSE DYES AND NAVY BLUE	CAS RN
C.I. Disperse Black 2; Synonyms: Diazo Black 2	6232-57-1
C.I. Disperse Blue 1; Synonyms: C.I. Number 64 500	2475-45-8 ✕
C.I. Disperse Blue 102	12222-97-8
C.I. Disperse Blue 106	12223-01-7 ✕, 68516-81-4
C.I. Disperse Blue 124	61951-51-7 ✕
C.I. Disperse Blue 26	3860-63-7, 100357-99-1, 13324-23-7
C.I. Disperse Blue 3	2475-46-9
C.I. Disperse Blue 35	12222-75-2 ✕
C.I. Disperse Blue 7	3179-90-6
C.I. Disperse Brown 1	23355-64-8
C.I. Disperse Orange 1	2581-69-3
C.I. Disperse Orange 149	85136-74-9
C.I. Disperse Orange 3	730-40-5 ✕
C.I. Disperse Orange 37/59/76; Disperse Orange 76 is a synonym of disperse orange 37	12223-33-5, 13301-61-6 ✕
C.I. Disperse Red 1	2872-52-8 ✕
C.I. Disperse Red 11	2872-48-2
C.I. Disperse Red 17	3179-89-3
C.I. Disperse Red 7	4540-00-5
C.I. Disperse Yellow 1	119-15-3
C.I. Disperse Yellow 23	6250-23-3
C.I. Disperse Yellow 3; Synonyms: C.I. Number 11 855	2832-40-8 ✕
C.I. Disperse Yellow 39	12236-29-2
C.I. Disperse Yellow 49	54824-37-2, 12239-15-5
C.I. Disperse Yellow 54	7576-65-0
C.I. Disperse Yellow 9	6373-73-5
Navy Blue; Synonyms: EC# 405-665-4, Index No 611-070-00-2 Component 1: C39H23ClCrN7O12S.2Na, Component 2: C46H30CrN10O20S2.3Na	# (Annex XVII, entry 43) 118685-33-9 -

Appendix F - BIOCIDAL AGENTS	CAS RN
<b>Silver (Ag) and its compounds</b>	
Used in textiles and leather. Silver Nano-particle complexes are antibiotic additives in plastics and fibres.	
Reaction mass of titanium dioxide and silver chloride	-
Silver adsorbed on silicon dioxide	-
Silver chloride	7783-90-6
Silver copper zeolite	130328-19-7
Silver nitrate	7761-88-8

Silver phosphate glass	308069-39-8
Silver sodium hydrogen zirconium	422-570-3
Silver sodium hydrogen zirconium phosphate	265647-11-8
Silver zeolite	-
Silver zinc zeolite	130328-20-0
<b>Trisubstituted tin organic</b>	
Used in textiles and leather. Those are also preservatives, fungicides and antifouling agents. (* = SVHC List)	
TBT (Tributyltin) (TBTs)	Various
TBTO (Tributyltin oxide)	56-35-9*
Tributyltin benzoate	4342-36-3
Tributyltin chloride	1461-22-9
Tributyltin fluoride	1983-10-4
Tributyltin linoleate	24124-25-2
Tributyltin methacrylate	2155-70-6
Tributyltin naphthenate	85409-17-2
DBT (Dibutyltin dichloride)	683-18-1*
<b>Other chlorophenols and biocidal agents</b>	
Used in textiles, leather, packing and transportation.	
Carbendazim	10605-21-7**
Chitosan	9012-76-4
Cu-HDO (Bis-(N-cyclohexyldiazoniumdioxy) –copper)	312600-89-8**
DiCP (Dichlorophenols), all isomers	25167-81-1
DMFu (Dimethylfumarate)	624-49-7
Ethyltrianol	107534-96-3
Guanidine, N,N'''-1,6-hexanediybis[N'-cyano-, polymer with 1,6-hexanediamine, hydrochloride (PHMB 1600; 1.8)	27083-27-8**, 32289-58-0**
Methylbromid	74-83-9
Mono-CP (Monochlorophenols), all isomers	25167-80-0
OPP (2-phenylphenol)	90-43-7
PCP and all isomers of TeCP – Pentachlorophenol (PCP), Tetrachlorophenols (TeCP)	87-86-5 (PCP)***, 131-52-2(PCP sodium salt)***, 935-95-5 (TeCP)***, 4901-51-3***, 58-90-2 (isomers of TeCP)***
Permethrin	52645-53-1
Phosphine	7803-51-2
Sulphuryl difluoride	2699-79-8
TriCP (Trichlorophenols), all isomers	25167-82-2
Triclosan	3380-34-5**
Triclocarban	101-20-2**
Zincpyrithion	13463-41-7

\* = SVHC List, \*\* = Banned PT9 List, \*\*\*=Banned in Norway in textiles and leather

Appendix G – OTHER FLAME RETARDANTS	CAS RN
<b>Boric acid, borate compounds</b>	
Use mainly in packaging, such as cellulosic materials. Wood veneers/pressed wooden panels, and boards. (* = SVHC List)	
Boric acid	10043-35-3*, 11113-50-1*
Disodium octaborate	12008-41-2*
Disodium tetraborate anhydrous	1303-96-4*, 12179-04-3*, 1330-43-4*
Orthoboric acid, sodium salt	13840-56-7*
Sodium perborate; perboric acid, sodium salt	234-390-0*
Sodium peroxometaborate	7632-04-04*
Tetraboron disodium heptaoxid, hydrate	12267-73-1*
<b>HBCD, HBCDD – Hexabromocyclododecane</b>	
Use mainly in textiles and packaging. Flame retardant treatment of products, (i.e. upholstery and interior textiles), where fire protection is required. Also used in packaging flakes made of polystyrene (PS). (* = SVHC List, ** = POP List)	
1,1,2,2,3,3-Hexabromocyclododecane	25637-99-4 */**
1,2,5,6,9,10-Hexabromocyclododecane	3194-55-6 */**
alpha-Hexabromocyclododecane	134237-50-6 */**
beta-Hexabromocyclododecane	134237-51-7 */**
gamma-Hexabromocyclododecane	134237-52-8 */**
<b>PBB, PBDE – Polybrominated biphenyls, Polybrominated diphenyl ethers</b>	
Used in textiles, leather/imitation leather, accessories and packaging. Used for flame-retardant treatment of products where fire protection is required. (* = SVHC List, ** = POP List, # = Annex XVII, entry 45, entry 8)	
DecaBDE (Decabromodiphenyl ether)	1163-19-5*/**
HeptaBDE (Heptabromodiphenyl ether)	207122-16-5**, 446255-22-7**

HexaBDE (Hexabromodiphenyl ether)	68631-49-2**, 207122-15-4**
Hexabromobiphenyl	36355-01-8**
OctaBDE (Octabromodiphenyl ether)	32536-52-0**/#
PBB (Polybrominated biphenyls) (mix)	59536-65-1 (mix)/#
PentaBDE (Pentabromodiphenyl ether)	32534-81-9**, 60348-60-9**
TetraBDE (Tetrabromodiphenyl ether)	5346-43-1**

Appendix H - VOLATILE ORGANIC COMPOUNDS (VOCs)	CAS RN
Shall not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes PU coating and glues/adhesives. They shall not be used for any kind of facility cleaning or spot cleaning.	
Acetophenone	98-86-2
Benzene	71-43-2 CMR fast track
Carbon Disulphide	75-15-0
Cresols (Methylphenoles) (Ortho-, Meta-, Para-Cresol)	95-48-7, 108-39-4, 106-44-5, 1319-77-3
Cyclohexanone	108-94-1
Ethylbenzene	100-41-4
Ethylene glycol dimethyl ether	110-71-4
Ethylene glycol monoethyl ether	110-80-5
Methyl ethyl ketone (MEK)	78-93-3
n-Hexane	110-54-3
Styrene	100-42-5
Toluene	108-88-3
Triethylene glycol dimethyl ether	112-49-2
Xylenes (Ortho-, Meta-, Para-Xylene)	95-47-6, 108-38-3, 106-42-3, 1330-20-7

Appendix I - TIN ORGANIC COMPOUNDS (Organostannic compounds)	CAS RN (a selection)
Those can be used as biocides, catalysts, heat stabilizers in production of plastics, rubber, glue/adhesives. In textiles and apparels, those can be associated with textile plastics/rubber, inks, pants, metallic glitter, in PU coatings, and PU membranes, etc. (* = SVHC List, # = Annex XVII)	
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1*
2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (MOTE)	27107-89-7
Bis(tributyltin) oxide (TBTO)	56-35-9*
Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4*
Dibutyltin compounds (DBTs)	Various #, 1102-53-5, 78-04-6
Dibutyltin dichloride (DBTC) (DBTDC)	683-18-1*
Dioctyltin compounds (DOT)	Various #, 15231-44-4, 870-08-6
Monobutyltin compounds (MBT)	Various, 78763-54-9
Monoctyltin compounds (MOT)	Various
Reaction mass of DOTE & MOTE	- *
Tricyclohexyltin compounds (TCyHT)	Various, 6056-50-4
Trioctyltin compounds( TOT)	Various, 250252-89-2
Triphenyltin and triphenyltin compounds (TPHT)	Various, 668-34-8
Tripropyltin compounds (TPT)	Various, 761-44-4
Dioctyltin dilaurate, stannate, dioctyl-, bis(coco acyloxy) derivatives., and any other stannate, dioctyl-, bis(fatty acyloxy) derivatives. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	- *
More substances of DBTs can be found in Chemical Guidance Appendix 4 (Pages 80)	Various
* = SVHC List, # = Annex XVII	

Appendix J – PHTHALATE ESTERS	CAS RN
* = SVHC List, ** = CMR fast track, # = Annex XVII, entry 51/52, ## = Annex XIV	
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters with ≥ 0.3% of dihexyl phthalate (84-75-3)	68515-51-5*/##
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4*/##
1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	84777-06-0*/##
1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (84-75-3)	68648-93-1*/##
BBP (Butyl benzyl phthalate)	85-68-7*/##
DBP (Dibutyl phthalate)	84-74-2*/##
DCHP (Di-cyclohexyl phthalate)	84-61-7*
DEHP (Di(2-ethylhexyl) phthalate)	117-81-7*/##
DEP (Diethyl phthalate)	84-66-2
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4*/##
DnHP/DHP (Dihexyl phthalate / Di-n-hexyl phthalate)	84-75-3*/** /##
DIBP (Diisobutyl phthalate)	84-69-5*/##
DIDP (Diisodecyl phthalate)	26761-40-0 /#, 68515-49-1

1,2-benzenedicarboxylic acid; di-C6-8-branched alkyl esters, C7-rich	71888-89-6*/** /#/#
Diisohexyl phthalate	71850-09-4*
DINP (Diisononyl phthalate)	28553-12-0 /#, 68515-48-0
DIPP (Diisopentyl phthalate)	605-50-5*/**/#
DMEP (2-Methoxyethyl phthalate)	117-82-8*/**/#
DNOP (Di-n-octyl phthalate)	117-84-0 /#
DPP (Dipentyl phthalate)	131-18-0*/**/#
NPIPP (n-pentyl-isopentyl phthalate)	776297-69-9*/**/#

\* = SVHC List, \*\* = CMR fast track, # = Annex XVII, entry 51/52, ## = Annex XIV

Appendix K – PFAS/PFCs Per- & Polyfluorinated Compounds	Acronym	CAS RN
* = SVHC List, ** = POP / Stockholm Convention		
10:2 FTA (1H,1H,2H,2H-Perfluorododecylacrylat) (Precursor)	10:2 FTA	17741-60-5
10:2 FTOH (1H,1H,2H,2H-Perfluorododecane-1-ol) (Precursor)	10:2 FTOH	865-86-1
2,3,3,3-Tetrafluoro-2-(perfluoropropoxy)propanoyl fluoride (PFPE)	HFPO-DA#	2062-98-8*
4:2 FTOH (1H,1H,2H,2H-Perfluorohexanol) (Precursor)	4:2 FTOH	2043-47-2
4:2 FTS (4:2 fluorotelomer sulfonate) (Precursor)	4:2 FTS	757124-72-4
6:2 FTA (1H,1H,2H,2H-Perfluorooctylacrylat) (Precursor)	6:2 FTA	17527-29-6
6:2 FTMA (3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl methacrylate) (Precursor)	6:2 FTMA	2144-53-8
6:2 FTOH (1H,1H,2H,2H-Perfluoro-1-octanol) (Precursor)	6:2 FTOH	647-42-7
6:2 FTS (6:2 fluorotelomer sulfonate) (Precursor)	6:2 FTS	27619-97-2
8:2 FTA (1H,1H,2H,2H-Perfluorodecylacrylat) (Precursor)	8:2 FTA	27905-45-9
8:2 FTMA (1H,1H,2H,2H-Perfluorodecyl methacrylate) (precursor)	8:2 FTMA	1996-88-9
8:2 FTOH (1H,1H,2H,2H-Perfluoro-1-decanol) (Precursor to PFOS)	8:2 FTOH	678-39-7
8:2 FTS (8:2 fluorotelomer sulfonate) (Precursor)	8:2 FTS	39108-34-4
Ag-PFOA (Silver perfluorooctanoate) (PFCA)	Ag-PFOA	335-93-3
Ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate (PFPE)	HFPO-DA#	62037-80-3*
APFO (Ammonium pentadecafluorooctanoate) (PFCA)	APFO	3825-26-1*/**
K-PFOA (Potassium perfluorooctanoate) (PFCA)	K-PFOA	2395-00-8
Et-PFOA (Ethyl perfluorooctanoate) (PFCA) (precursor)	Et-PFOA	3108-24-5
F-PFOA (Perfluorooctanoyl fluoride) (PFCA)	F-PFOA	335-66-0
HFPO-DA, (2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid) (PFPE)	HFPO-DA(#),	13252-13-6*
Me-PFOA (Methyl pentadecafluorooctanoate) (PFCA)	Me-PFOA	376-27-2
Na-PFOA (Sodium perfluorooctanoate) (Sodium=Na) PFCA	Na-PFOA	335-95-5
N-Et-FOSA (N-Ethyl-Perfluorooctanesulfonamide) (PFSA) (precursor)	N-Et-FOSA	4151-50-2**
N-Et-FOSE (N-Ethyl-Perfluorooctanesulfonamidoethanol) (PFSA) (precursor)	N-Et-FOSE	1691-99-2**
N-Me-FOSA (N-methyl-perfluorooctanesulfonamide) (PFSA) (precursor)	N-Me-FOSA	31506-32-8**
N-Me-FOSE (N-Methyl-Perfluorooctanesulfonamidoethanol) (PFSA) (precursor)	N-Me-FOSE	24448-09-7**
PFBA (Perfluorobutanoic acid) (PFCA)	PFBA	375-22-4
PFBS (Perfluorobutanesulfonic acid) (PFSA)	PFBS	375-73-5*
PFDA (Perfluorodecanoic acid) (PFCA), its sodium & ammonium salts	PFDA	335-76-2*/**, 3108-42-7*/**, 3830-45-3*/**
PFDoA (Perfluorododecanoic acid) (PFCA) (precursor)	PFDoA	307-55-1*/**
PFHpA (Perfluoroheptanoic acid) (PFCA)	PFHpA	375-85-9
PFHxA (Perfluorohexanoic acid) (PFCA)	PFHxA	307-24-4*, 882489-14-4*
PFHxS (Perfluorohexanesulfonic acid) (PFSA)	PFHxS	355-46-4*/**, 108427-53-8*/**
PFNA (Perfluorononanoic acid) (PFCA), its sodium ammonium salts	PFNA	375-95-1*/**, 21049-39-8*/**, 4149-60-4*/**
PFOA (Perfluorooctane acid) and its related substances (PFCA)	PFOA	335-67-1*/**, 3825-26-1*/**
PFOS (Perfluorooctane Sulfonate) (PFSA)	PFOS	1763-23-1**
PFOSA (Perfluorooctanesulfonamide) (PFSA) (precursor)	PFOSA	754-91-6**
PFPeA (Perfluoropentanoic acid) (PFCA)	PFPeA	2706-90-3
PFTA (Perfluorotetradecanoic acid) (PFCA) / Heptacosfluorotetradecanoic acid	PFTA	376-06-7*/**
PFTDA (Perfluorotridecanoic acid) (PFCA)	PFTDA	72629-94-8*/**
PFUnA (Perfluoroundecanoic acid) (PFCA)	PFUnA	2058-94-8*/**
Potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionate (C6 F11 KO3) (PFPE)	HFPO-DA#	67118-55-2*

\* = SVHC List, \*\* = POP / Stockholm Convention, # = used as emulsifiers in fluoropolymers production, such as PTFE (polytetrafluoroethylene)

Appendix L – PAH – Polycyclic aromatic hydrocarbons	CAS RN
* = SVHC List, ** = CMR fast track, # = Annex XVII entry 50	
1-Methylpyrene	2381-21-7

1-Nitropyrene	5522-43-0
3-Methylcholanthrene	56-49-5
5-Methylchrysene	3697-24-3
7,12-Dimethylbenz(a)anthracene	57-97-6
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7*
Anthracene oil distillation fractions	-- *
Benzo(a)anthracene (BaA)	56-55-3**/**/#
Benzo(a)pyrene (BaP)	50-32-8**/**/#
Benzo(b)fluoranthene (BbFA)	205-99-2**/#
Benzo(e)pyrene (BeP)	192-97-2**/#
Benzo(g,h,i)perylene	191-24-2*
Benzo(j)fluoranthene (BjFA)	205-82-3**/#
Benzo(k)fluoranthene (BkFA)	207-08-9**/**/#
Chrysene (Benzo(a)phenanthrene) (CHR)	218-01-9**/**/#
Cyclopenta(c,d)pyrene	27208-37-3
Dibenz(a,h)acridine	226-36-8
Dibenz(a,j)acridine	224-42-0
Dibenzo(a,e)fluoranthene	5385-75-1
Dibenzo(a,e)pyrene	192-65-4
Dibenzo(a,h)anthracene (DBAhA)	53-70-3**/#
Dibenzo(a,h)pyrene (DBAhP)	189-64-0
Dibenzo(a,i)pyrene	189-55-9
Dibenzo(a,l)pyrene	191-30-0
Fluoranthene	206-44-0*
Fluorene	86-73-7
indeno(1,2,3-c,d)pyrene	193-39-5
Naphthalene	91-20-3
Phenanthrene	85-01-8*
Pyrene	129-00-0*

\* = SVHC List, \*\* = CMR fast track (A17e72), # = Annex XVII entry 50

Appendix M – METALS and their compounds/salts	CAS RN
<b>Arsenic (As)</b> and its compounds	
Used in textiles, accessories and packaging, such as glass, metal alloy, and as preservatives. (* = SVHC List, ** = CMR fast track)	
Arsenic (metal)	7440-38-2**/**
Arsenic acid	7778-39-4**/**
Calcium arsenate	7778-44-1**/**
Diarsenic pentoxide	1303-28-2**/**
Diarsenic trioxide	1327-53-3**/**
Triethyl arsenate	15606-95-8**/**
<b>Cadmium (Cd)</b> and its salts	
Used in textiles, leather/imitation leather, accessories and packaging. Can also occur in pigmented plastisol or rubber prints. Used for surface treatment. As stabilizer and pigment in plastics. (* = SVHC List, ** = CMR fast track)	
Cadmium (Cd) (metal)	7440-43-9**/**
Cadmium carbonate	513-78-0**/**
Cadmium chloride	10108-64-2**/**
Cadmium fluoride	7790-79-6**/**
Cadmium hydroxide	21041-95-2**/**
Cadmium nitrate	10325-94-7**/**
Cadmium sulphate	10124-36-4, 31119-53-6**/**
Cadmium sulphide	1306-23-6**/**
Cadmium, Cadmium oxide	1306-19-0**/**
<b>Lead (Pb)</b> and its salts	
Used in accessories and packaging. They are additives in plastics as stabilizers, can also be found in colored plastic materials, metallic surface coating of buttons and accessories. (* = SVHC List, ** = CMR fast track)	
[Phthalato(2-)]dioxotrilead	69011-06-9 **/**
Acetic acid, lead salt, basic	51404-69-4 **/**
Dioxobis(stearato)trilead	12578-12-0 **/**
Fatty acids, C16-18, lead salts	91031-62-8 **/**
Lead (Pb) (metal)	7439-92-1**/**
Lead bis(tetrafluoroborate)	13814-96-5 **/**
Lead chromate	7758-97-6 **/**
Lead chromate molybdate sulphate	12656-85-8 **/**

Lead cyanidate	20837-86-9 */**
Lead di(acetate)	301-04-2 */**
Lead diazide	13424-46-9 */**
Lead dinitrate	10099-74-8 */**
Lead dipicrate	6477-64-1 */**
Lead hydrogen arsenate	7784-40-9 */**
Lead monoxide (Lead oxide)	1317-36-8 */**
Lead oxide sulfate	12036-76-9 */**
Lead styphnate	15245-44-0 */**
Lead sulfochromate	1344-37-2 */**
Lead titanium trioxide	12060-00-3 */**
Lead titanium zirconium oxide	12626-81-2 */**
Lead(II) bis(methanesulfonate)	17570-76-2 */**
Orange lead (Lead tetroxide)	1314-41-6 */**
Pentalead tetraoxide sulphate	12065-90-6 */**
Pyrochlore, antimony lead yellow	8012-00-8 */**
Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8 */**
Silicic acid, lead salt	11120-22-2 */**
Sulfurous acid, lead salt, dibasic	62229-08-7 */**
Tetraethyllead	78-00-2 */**
Tetralead trioxide sulphate	12202-17-4 */**
Trilead bis(carbonate)dihydroxide	1319-46-6 */**
Trilead dioxide phosphonate	12141-20-7 */**
<b>Mercury (Hg) and its compounds</b>	
Used in textiles, accessories and packaging. Used as catalysts in production of PU coatings, adhesives, sealants and elastomers. Norway prohibits manufacture, import, export and sale of articles that contain mercury or its compounds ≥ 0.001% by weight (10 mg/kg total content). Total content of Cd, Cr+6, Pb and Hg in packaging or packaging components shall not exceed 100 mg/kg.	
Mercury (Hg) - synonyms: Quicksilver	7439-97-6
Phenylmercury 2-ethylhexanoate	13302-00-6
Phenylmercury acetate	62-38-4
Phenylmercury neodecanoat	26545-49-3
Phenylmercury octanoate	13864-38-5
Phenylmercury propionate	103-27-5

Appendix N - Chromium VI (Cr+6, hexavalent chromium) SVHC compounds	CAS RN
Used in textiles, leather/imitation leather, accessories and packaging. Chromic acid is used as wood preservative (packaging). Some dyes can also contain chromium. Oxidation agent, fixing chemical for finishing of direct dyes for improving their wash fastness, for oxidation of vat & sulphur dyes, for finishing of acid dyes on silk and wool, for tanning of leather, for etching of synthetic leather and rubber. Used also as pigments (especially in red, orange, yellow and green), as stabilizer for PVC, found also in fertilizers, biocides, and paints. (* = SVHC List, ** = CMR Fast Tract)	
Ammonium dichromate	7789-09-5 */**
Chromic acid	7738-94-5* /**
Chromium trioxide	1333-82-0* /**
Dichromic acid	13530-68-2* /**
Dichromium tris(chromate)	24613-89-6* /**
Lead chromate	7758-97-6* /**
Lead chromate molybdate sulphate	12656-85-8* /**
Lead sulfochromate	1344-37-2* /**
Pentazinc chromate octahydroxide	49663-84-5* /**
Potassium chromate	7789-00-6* /**
Potassium dichromate	7778-50-9* /**
Potassium hydroxyoctaoxidizincatedichromate	11103-86-9* /**
Sodium chromate	7775-11-3* /**
Sodium dichromate dehydrate	7789-12-0* /**, 10588-01-9* /**
Strontium chromate	7789-06-2* /**
* = SVHC Liste, ** = CMR Fast Track	