



# Nilson Group Chemical Restriction 2023

## Restricted Substance List (RSL)

\*Updates 2023 – please see green markings \* 2023 August updates – see yellow markings

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## **General**

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The standards described in this document are applicable on all orders at all times, valid from the time of written confirmation.

**Test methods** – Tests according to the latest published European standard (EN) and/or ISO test methods. In case there is no EN and/or ISO standard available «*not yet available*» the laboratory used by Nilson Group, the checklist for lab should be used to ensure the quality of the lab that is used by Nilson Group. In case of differing test result, the test performed by Nilson Group will be valid.

**Laboratory indicative limit value (mg/kg)** - commissioned lab must report according to the "laboratory limit" which in this RSL template is called "Lab. indicative limit value (mg/kg)". These lab limits should be the lab's reporting limits and NOT legal limits.

In case of quality dispute; 3<sup>rd</sup> party documentation will be required. 3<sup>rd</sup> party test results will not be required unless requested.

## **Material Safety Data Sheet (MSDS)**

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All suppliers to Nilson Group must keep record of all chemical substances used in production and all associated processes. This list shall include name of the chemical product, the purpose/area of use and a reference to a Material Safety Data Sheet (MSDS).

Suppliers can and will be asked to submit this list to CSR or an accredited auditor for inspection. The buying and product departments reserve the right to ask for additional documentation, showing the chemicals that have been used during production.

## **PVC (polyvinyl chloride)**

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None of Nilson Group's products shall contain the material PVC (polyvinyl chloride).

## **PFAS (perfluorinated substances)**

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None of Nilson Group's products shall contain any PFAS (perfluorinated) substances. This means no deliberately added active substances are allowed, in process or such as waterrepellant function on material or product.

## **Biocidal Substances**

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None of Nilson Group's products shall contain any Biocidal substances. Means no deliberately added active substances are allowed, in process or such as anti-odour-, smell- etc. function on material or product.

## **Laws and regulations**

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All suppliers to Nilson Group must be in compliance with regulations in all markets where Nilson Group operate.

### **LEGAL BACKGROUND**

#### **UN global treaties on certain hazardous chemicals such as Persistent Organic Pollutants (POPs)**

##### **UN global treaties on certain hazardous chemicals such as POPs**

Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from May 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs).

The Rotterdam Convention (formally, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade) is a multilateral treaty to promote shared responsibilities in relation to importation of hazardous chemicals.

The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury.

##### **EU/EEA chemicals regulations**

There is a range of chemicals regulations in EU/EEA that cover requirements of articles and/or chemical products depending on to what extent certain hazardous chemicals pose possible unacceptable risk to users and the environment under normal foreseeable conditions/use.

##### **Such regulatory frame works are**

- REACH (EU Regulation 1907/2006) and related amendments
- EU POP regulation (EU Regulation 850/2004 and 519/2012) and related amendments
- Biocide Product regulation (EU Regulation 528/2012) and related amendments.
- EU directive concerning packaging materials (94/62/EC) and related amendments.
- RoHS Directive (2011/65 / EU) restricting the presence of hazardous chemical substances in electrical and electronic equipment.

##### **Restrictions (EU/EEA)**

Restrictions are regulatory measures to protect human health and the environment from unacceptable risks posed by chemicals. Restrictions may limit or ban the manufacture, placing on the market or use of a substance. A restriction can apply to any substance on its own, in a mixture or in an article, including those that do not require registration. Restrictions setting out conditions for the placing on the market of substances apply to both domestic production and imports.

##### **Duty to inform your customer on substances for authorisation (EU/EEA)**

Substances of Very High Concern (SVHC) are listed on Candidate List for authorization of the Regulation (EC) No 1907/2006 (REACH). All professional actors have an obligation to inform their consumers about the content of SVHC (as a minimum the name of the substance(s)) exceeding 0.1 % weight by weight (= 1000 mg/kg) in individual parts of an article, that are defined as articles. If the consumers are professional actors, there is an immediate information duty, but within 45 days for private consumers.

### **Severe hazardous substances**

**PBT, vPvB, CMR or ED** Substances defined as persistent, bioaccumulative and toxic (**PBT**), very persistent and very bioaccumulative (**vPvB**), carcinogenic, mutagenic and toxic for reproduction (**CMR**), endocrine disruptors (**ED**) or equivalent concern cannot exceed 1000 mg/kg in a product. If a specific substance is stated both in the NilsonGroup RSL and as PBT, vPvB, CMR or ED, the NilsonGroup requirements must be followed.<sup>1</sup>

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<sup>1</sup>Laws and regulations of countries that products will be sold at must be followed.

## Clarification of the terms in the Restricted Substances List

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**Table 1** provides a quick review of the major restricted substances and the risk level associated with each substance for different materials.

**Table 2** is an extensive list of regulated chemicals in EU/EEA with relevance to Nilson Groups products that show restricted substances and the maximum concentrations.

### DEFINITIONS IN TABLE 2

**CAS RN** - For every substance, the list states the identification number (CAS No) according to Chemical Abstract Services.

**Severall** – Is stated instead of CAS number, the substance has several substances and CAS numbers covered by the specification.

In case there is a defined range of regulated substances, these are listed in annexes.

### *Different types of limits and their different meanings:*

**Legal limit** - Above is illegal – below is legal.

**Laboratory limits, such as LOD and LOQ** - Above is detectable – below is not detectable.

**Company limit/ Nilson Group requirement for suppliers** - Above is not acceptable – below is acceptable. can be everything from legal limits down to usage ban.

**Detection Limit** - Is defined as the lowest possible value that can be found during testing with a specific testmethod. Whenever test methods have been revised and the detection limit has been changed, the new detection limit must be followed.

The limits of detection (LOD) and quantification (LOQ) are defined as the lowest concentration of the analyte that can be reliably detected and quantified, respectively. Usually the LOD and LOQ refer to the limits associated with 95% probability of obtaining a correct result.

**Not Detected** - Substance stated with “Not Detected” as a requirement should not be found above the Detection Limit.

**Usage ban** - When a substance is defined as “Usage ban” this means that the substance should not be present and used during production directly or indirectly through transformation in processes. Those substances cannot be present in the product over the Detection Limit.

**Precaution:** Assure strict and safe work environment measures in the process.

**Restricted** means restricted according to EU/EEA harmonised chemicals regulations.

**SVHC** means Substances of Very High Concern (SVHC) that are listed on Candidate List for authorization of the Regulation (EC) No 1907/2006 (REACH).

**Limit value** – Limit values are based on the highest allowed content of the substance per kilogram article or part thereof.

**No test methods given (N/A)** - For those chemical substances that have no official standard testing method report the method used by the laboratories through Appendix 18 Checklist for laboratories to answer.

**Relationship between units used in the guide**

1000	mg/kg	equals	1000	ppm	(parts per million)
			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

**Table 1 – Summary of the major restricted substances for different materials**

	MATERIAL								
	Textiles – Natural Fibres	Textiles – Synthetic fibres	Textiles – Blend Fibres	Plastic, Rubber	Coating/ Treatments, Prints	Leather	Metal	Antibacterial treatment	Storage and transport
Banned arylamines derived from azo dyes	•	•	•		•	•			
Carcinogenic dyestuffs and pigments	•	•	•	•	•	•			
Allergenic disperse dyes and Navy Blue	•	•	•		•	•			
Quinoline	•	•	•	•	•	•			
Chromium VI (Cr <sup>+6</sup> )	•		•		•	•			
Chloro paraffins (SCCP and MCCP)				•	•	•			
Nickel							•		
Lead							•		
Cadmium							•		
Phthalate esters		•	•	•	•				
Lead salts		•	•	•	•	•			
Cadmium salts		•	•	•	•	•			
Dialkyltin compounds (e.g DOT, DBT)		•	•	•	•				
Formaldehyde	•	•	•		•	•			
Per and polyfluorinated substances (PFAS)		•	•		•	•			
NMP; DMAC, DMFa <sup>1</sup>		•	•						
PBB				•					
PBDE (Tetra-, Penta- Hexa, HeptaBDE, OctaBDE, DecaBDE)				•					
HBCDD				•					
TCEP				•					
Trixylyl phosphate				•					
Trisubstituted tin organic compounds		•	•			•		•	
Triclosan	•	•	•					•	
Cu-HDO	•	•	•					•	
Silver and its compounds	•	•	•					•	
Fungicides (DMFu <sup>2</sup> )		•	•	•		•			•
Fungicides (PCP, TeCP – isomers, thiram)									•
Insecticides (permethrin, bronopol etc.)									•
Fumigants (Methyl Bromide, Phosphine and Hydrogen cyanide, Metam sodium.) <sup>3</sup>									•
Alkylphenoletoxylates (APEO) such as onylphenoletoxylates, (NPEO) and oktylphenoletoxylates, (OPEO)	•	•	•			•			
Volatile Organic compounds (VOC)				•		•			
Chloro organic compounds (e.g carriers)	•	•	•	•	•	•			
Polycyclic aromatic hydrocarbons (PAH) <sup>4</sup>				•		•			



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<sup>1</sup> Relevant for acrylate or urethane coatings (DMFa: dimethylformamide)

<sup>2</sup> DMFu: dimethylfumarate

<sup>3</sup> IMO – Recommendations on the safe use of pesticides in ships applicable to the fumigation of cargo holds (2008)

<sup>4</sup> Relevant when Carbon Black (a black pigment) or mineral oils as softeners are used.

**Table 2 - Extensive list of regulated substances**

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Alkylphenol ethoxylates (APEO) and derivatives. Alkylphenols (AP)	Annex 1	EN ISO 18254-1:2016, 2:2019 (textile), (APEO)  EN ISO 21084:2019 (textile), (AP)  EN ISO 18218-1:2015 (APEO direct method, leather)  EN ISO 18218-2:2019 (APEO indirect method, leather)	Usage ban	< <sup>1</sup> 10	Annex 1
Antimony and its compounds	7440-36-0 (antimony metal)  Several	EN 16711-1,-2:2015 (textile) EN ISO 17072-1, -2:2019 (leather)	< 500 mg/kg (total content)	< 100	
Arsenic compounds	Annex 2	EN 16711-1,-2:2015 (textile) EN ISO 17072-1:2019 (leather) EN ISO 17072-2:2022 (leather)	Extractable: 0,2 mg/kg Total: 25 mg/kg	< 1	Annex 2
Bisphenols	80-05-07 4,4'-Isopropylidenediphenol (BPA)	ISO/DIS 11936 (leather)  EN ISO 11936:2023	Usage ban	< 1	SVHC and restricted
	77-40-7 4,4'-(1-methylpropylidene)bisphenol (BPB)		Usage ban	< 1	SVHC
	6807-17-6:		Usage ban	< 1	SVHC

<sup>1</sup> < means "less than"

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
	2,2-bis(4'-hydroxyphenyl)-4-methylpentane				
	80-09-14,4'-sulphonyldiphenol (BPS)		Usage ban	< 1	SVHC
	80-07-9 Bis(4-chlorophenyl) sulphone (BPCS)		Usage ban	< 1	SVHC
C,C'-azodi(formamide) (ADCA)	123-77-3	Not yet available	Usage ban	< 10	SVHC
Copper and its compounds	7440-50-8 (copper metal)  Several	EN 16711-1,-2:2015 (textile)  EN ISO 17072-1:2019 (leather)  EN ISO 17072-2:2022 (leather)	< 25 mg/kg (total content)	< 1	
Ethylenediamine (EDA)	107-15-3	Not yet available	Usage ban	< 10	SVHC
Ethylenethiourea	96-45-7	Not yet available	Usage ban	< 1	SVHC
N-(hydroxymethyl)acrylamide	924-42-5	Not yet available	Usage ban	< 10	SVHC
Formamide	0075-12-07	Not yet available	< 50 mg/kg	< 10	SVHC
Hydrazine	302-01-2	Not yet available	Usage ban	< 10	SVHC
Isocyanates	Annex 13	EN 1242:2013 (adhesives)  EN ISO 14896:2009 (PU raw material)	<b>Precuation:</b> PU-based adhesives are the only option for gluing	< 1	Annex 13
Nitrosamines	Annex 14	EN 12868:2017 (rubber)	<b>Precuation:</b>	< 0,5	Annex 14

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
		EN ISO 19577:2019 (footwear)	Occurrence as impurities in rubber		
1-vinylimidazole	1072-63-5	Not yet available	Usage ban	< 10	SVHC
2-methylimidazole	693-98-1	Not yet available	Usage ban	< 10	SVHC
2-methoxyethyl acetate	110-49-6	Not yet available	Usage ban	< 10	SVHC
Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	Not yet available	< 1mg/kg	< 10	SVHC
PAH - Polycyclic aromatic hydrocarbons	Annex 3	EN 17132:2019 (textile)  EN ISO 16190:2021 (footwear)	Usage ban of compounds that can generate PAH	< 0,1	Annex 3
Quinoline	91-22-5	Not yet available	< 10mg/kg	< 0,1	Restricted
Solvents - Aliphatic organic solvents	Several	Not yet available	<b>Usage ban of</b> Cyclohexane (CAS RN 110-82-7)	< 0,1	Restricted is Cyclohexane (CAS RN 110-82-7)
Solvents - Aromatic organic solvents	Several	Not yet available	<b>Usage ban of</b> benzene (CAS RN 71-43-2) <b>and</b> Toluene (CAS RN 108-88-3)  <b>Precaution:</b> Ethylbenzene CAS 100-41-4 Cyclohexanone, CAS 108-94-1	< 0,1	Restricted in EU/EEA are: benzene (CAS RN 71-43-2) and Toluene (CAS RN 108-88-3)

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Solvents - Chlorinated organic solvents	Annex 4	EN 17137:2018 (textile)	Usage ban of listed in annex 4	< 0,1	Annex 4
Solvents – 1,4 dioxane	123-91-1	Not yet available	Usage ban	< 1	SVHC
Solvents - DMFa (N,N-dimethylformamide)	68-12-2	EN 17131:2019 (textile)  CEN ISO/TR 16178:2021 (footwear)  EN ISO 16189:2021 (footwear)	500 mg/kg  sum of DMFa, DMAC and NMP <500 mg/kg	< 1	SVHC and restricted
Solvents - DMAC (N,N-dimethylacetamide)	127-19-5	Not yet available	100 mg/kg  sum of DMFa, DMAC and NMP <500 mg/kg	< 1	SVHC and restricted
Solvents - NMP (N-methyl-2-pyrrolidone)	872-50-4	EN ISO 19070:2016 (leather)	500 mg/kg  sum of DMFa, DMAC and NMP <500 mg/kg	< 1	SVHC and restricted
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	Not yet available	Usage ban	< 10	SVHC
Tin organic compounds (Organostannic compounds)	Annex 15	EN ISO 22744-1:2020 (textile)  CEN ISO/TS 16179:2012 (footwear)	Usage ban	< 10	SVHC and restricted
tris(2-methoxyethoxy)vinylsilane	1067-53-4	Not yet available	Usage ban	< 10	SVHC

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Allergenic dyes	Annex 5	EN ISO 16373-1:2015,-2,-3:2014 (textile)	Usage ban	< 5	Annex 5
Restricted arylamines related to azo dyes	Annex 6	EN ISO 14362-1, 3:2017 (textile)  EN ISO 17234-1:2020 (leather)  EN ISO 17234-2:2011 (leather)	Usage ban	< 5	Annex 6
Benzotriazols (UV-320, UV-327, UV-328 and UV-350)	3846-71-7 (UV320)  3864-99-1 (UV327)  25973-55-1 (UV 328)  36437-37-3 (UV 350)	ISO 24040:2022 (textiles)	Usage ban	< 10	SVHC
3-benzylidene camphor (1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1] heptan-2-one) (abbr: 3-BC)	15087-24-8	Not yet available	Usage ban	< 10	SVHC
Boric acid, borate compounds	Annex 17	Not yet available	Usage ban	< 10	SVHC and restricted
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	Not yet available	Usage ban	< 10	SVHC
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	Not yet available	Usage ban	< 10	SVHC

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Cadmium (Cd) and cadmium salts	7440-43-9 (cadmium metal)  Several	EN 16711-1, -2:2015 (textile)  EN ISO 17072-1:2019 (leather)  EN ISO 17072-2:2022 (leather)	Extractable: 0,2 mg/kg Total: 25 mg/kg	< 1	SVHC and restricted
Cobalt (Co) and its compounds	7440-48-4 (cobalt metal)  Annex 16	EN 16711-1, -2:2015 (textile) EN ISO 17072-1:2019 (leather) EN ISO 17072-2:2022 (leather)	Total: 25 mg/kg	< 10	SVHC and restricted
CMR, Carcinogenic, Mutagenic, Reproductive toxic dyestuffs	Annex 7	EN ISO 16373-1.2015, -2, -3:2014 (textile)	Usage ban	< 5	Annex 7
Chloroparaffins	85535-84-8 (SCCP)	EN ISO 22818:2021 (textile)  EN ISO 18219-1:2021 (SCCP, leather)	Usage ban	< 10	SVHC and restricted
	85535-85-9 (MCCP)	EN ISO 18219-2:2021 (MCCP, leather)	Usage ban	< 10	SVHC
Chromium VI	18540-29-9	EN ISO 17075-1, -2:2017 (leather)  EN ISO 10195:2021 (ageing of leather)	< 3	< 3	SVHC and restricted
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	Not yet available	Usage ban	< 100	SVHC
Dechlorane <sup>TM</sup> Plus (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)	13560-89-9	Not yet available	Usage ban	< 1	SVHC

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Formaldehyde	50-00-0	EN ISO 14184-1,-2:2011 (textile)  EN ISO 17226-1:2021(leather)  EN ISO 17226-2:2019 (leather)  EN ISO 17226-3:2011(formaldehyde emissions from leather)	20 mg/kg	< 13	Annex 8
Glutaraldehyde	111-30-8	Not yet available	< 20 m/kg	< 15	SVHC
Melamine	108-78-1	Not yet available	Usage ban	< 200 mg/kg	SVHC
Hexabromocyclododecan (HBCDD)	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7 and 134237-52-8	EN ISO 17881-1:2016 (textile)	Usage ban	< 5	Restricted
Lead (Pb) and lead salts	7439-92-1 (lead metal)  Several	EN 16711-1,-2:2015, -3:2019 (textile)  EN ISO 17072--1:2019 (leather) EN ISO 17072-2:2022 (leather)	Extractable: 0,2 mg/kg Total : 50 mg/kg	< 1	SVHC and restricted
Mercury (Hg)	7439-97-6	EN 16711-1,-2:2015 (textile)  EN ISO 17072-1:2019 (leather) EN ISO 17072-2:2022 (leather)	Total: 0,5 mg/kg	< 1	SVHC and restricted
Nickel (Ni), in accessories	7440-02-0	EN 12472:2020 and EN 1811:2011+A1:2015 (nickel release in skin contact)	Usage ban	< 1 (total), 0,2 µg/cm²/week (migration)	Restricted



EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Per and polyfluorinated alkyl substances (PFAS)	Annex 9	EN 17681-1:2022 (non volatile PFAS, textiles) EN 17681-2:2022 (volatile PFAS, textile) EN ISO 23702-1:2018 (leather)	Usage ban	< 0,01 < 0,1 ug/m2 (PFOS)	Annex 10
Ortho-phthalate esters	Annex 11	EN ISO 14389:2022 (textile) EN ISO 16181-1, -2:2021 (footwear)	Usage ban	< 5	Annex 11
Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)	Annex 12	EN ISO 17881-1:2016 (textile)	Usage ban	< 5	Annex 12
bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof Bis(2-ethylhexyl) tetrabromophthalate	Several	EN ISO 17881-1:2016 (textile)	Usage ban	<100	SVHC
2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol also called TBBPA	79-94-7	EN ISO 17881-1:2016 (textile)	Usage ban	< 100	SVHC
1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	37853-59-1	EN ISO 17881-1:2016 (textile)	Usage ban	< 100	SVHC
2,2-bis(bromomethyl)propane 1,3-diol (BMP)	3296-90-0	EN ISO 17881-1:2016 (textile)	Usage ban	< 10	SVHC
2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)	36483-57-5	EN ISO 17881-1:2016 (textile)	Usage ban	< 10	SVHC

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
2,3-dibromo-1-propanol (2,3-DBPA)	1522-92-5 96-13-9	EN ISO 17881-1:2016 (textile)	Usage ban	< 10	SVHC
Siloxanes (D4, D5 and D6)	556-67-2 (D4) 541-02-6 (D5) 540-97-6 (D6)	Not yet available	500 mg/kg	< 10	SVHC
Halogenated aryl phosphates – TCEP, TBPP, TCPP and TDCPP	115-96-8, 126-72-7, 13674-84-5, 13674-87-8	EN ISO 17881-2:2016 (textile)	Usage ban	< 1	SVHC
Aryl phosphates Trixylyl phosphate, Triphenylphosphate	25155-23-1, 115-86-6	EN ISO 17881-2:2016 (textile)	Usage ban	< 10	SVHC
Tris(aziridiny)phosphinoxide (TEPA)	545-55-1	EN ISO 17881-2:2016 (textile)			Restricted
RESTRICTED or BANNED BIOCIDES					
General test methods for biocides in textiles, leather and footwear		EN ISO 20743:2021 (textile) EN ISO 22517:2021 (leather) EN ISO 19574:2022 (footwear)			
Cu-HDO (Bis-(N-cyclohexyldiazoniumdioxy) –copper)	27083-27-8	Not yet available	Usage ban	< 1	Banned
Dimethylfumarate (DMFu)	624-49-7	EN 17130:2019 (textile) EN ISO 16186:2021 (footwear)	Usage ban	< 0,01	Restricted

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Guanidine, N,N'''-1,6-hexanediyldis[N'-cyano-, polymer with 1,6-hexanediamine, hydrochloride (PHMB 1600; 1.8)	27083-27-8	Not yet available	Usage ban	< 1	Banned
Pentachlorophenol (PCP) and all isomers of Tetrachlorophenols (TeCP)	87-86-5 Several	EN 17134-2:2023 (textile)  EN ISO 17070:2015 (leather)  CEN/TR 14823:2003 (wood)  EN ISO 15320:2011 (pulp and paper)	Usage ban	< 0,1	Restricted
Permethrin	52645-53-1	Not yet available	Usage ban	< 1	
Silver and its compounds	Several	Not yet available	Usage ban	< 1	Nanosilver is banned
Trisubstituted tin organic compounds	Several	EN ISO 22744-1,-2:2020 (textile)  CEN ISO/TS 16179:2012 (footwear)	Usage ban	< 1	Restricted
Triclosan	3380-34-5	EN 17134:2019  (2-phenylphenol (OPP) and triclosan in textile materials)	Usage ban	< 1	Banned
2-phenylphenol (OPP)	90-43-7 13707-65-8 (potassium salt), 132-27-4 (sodium salt)	EN ISO 13365-1,-2:2020 (TCMTB, PCMC, OPP, OIT, content in leather)	Usage ban	< 1	Banned
Zincpyrithion	13463-41-7	Not yet available	Usage ban	< 1	

EU/EEA regulated substances relevant to NilsonGroup products	CAS RN	Latest published: CEN/ISO test methods	Nilson Group requirement for suppliers	Laboratory indicative limit value (mg/kg)	Legal status
Bronopol	52-51-7	Not yet available	Usage ban	< 1	Banned
Thiram	137-26-8	Not yet available	Usage ban	< 1	Banned
Metam-sodium ( (sodium N-methyldithiocarbamate)	137-42-8	Not yet available	Usage ban	< 1	Banned
Parabenes	Several	Not yet available	Usage ban	< 1	Banned
Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	Not yet available	Usage ban	< 1	Banned
Isobutyl 4-hydroxybenzoate (isobutylparabene)	4247-02-3	Not yet available	Usage ban	< 1	Banned
Polyhexamethylene biguanide hydrochloride with a mean number-average molecular weight (Mn) of 1415 and a mean polydispersity (PDI) of 4.7 (PHMB(1415;4.7)	Several 1802181-67-4	Not yet available	Usage ban	< 1	Banned
Orto phenyl-phenols (OPP) also called biphenyls or 2-phenylphenols	13707-65-8 (potassium salt), 132-27-4 (sodium salt)	Not yet available	Usage ban	< 1	Banned
Sodium p-chloro-m-cresolate	15733-22-9	Not yet available	Usage ban	< 1	Banned

**Annex 1 - Alkylphenol ethoxylates (APEO) and derivatives**

Substances	CAS RN	Legal status
4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-OP)	140-66-9	SVHC
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (4-tert-OPnEO)	Several	SVHC
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (4-tert-OPnEO, UVCB substance)	Several	SVHC
4-Nonylphenol, branched and linear (4-NP)	Several	SVHC
4-Nonylphenol, branched and linear, ethoxylated (4-NPnEO)	Several	SVHC and restricted
4-tert-butylphenol	98-54-4	SVHC
Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	Several	SVHC
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP)	Several	SVHC

**Annex 2 – Arsenic compounds**

Substance	CAS RN	Legal status
Arsenic acid	7778-39-4	SVHC and restricted
Calcium arsenate	7778-44-1	SVHC and restricted
Diarsenic Pentoxide	1303-28-2	SVHC and restricted
Diarsenic Trioxide	1327-53-3	SVHC and restricted
Triethyl arsenate	15606-95-8	SVHC and restricted

**Annex 3 - Poly aromatic hydrocarbons (PAH)**

Substances	CAS RN	Legal status
Benzo(a)anthracene	56-55-3	SVHC and restricted
Benzo(a)phenanthrene (chrysene)	218-01-9	SVHC and restricted
Benzo(a)pyrene	50-32-8	SVHC and restricted
Benzo(b)fluoranthene	205-99-2	SVHC and restricted
Benzo(j)fluoranthene	205-82-3	SVHC and restricted
Benzo(k)fluoranthene	207-08-9	SVHC and restricted
Dibenzo(a,h)anthracene	53-70-3	SVHC and restricted
Benzo[e]pyrene	192-97-2	SVHC and restricted
Benzo[ghi]perylene	191-24-2	SVHC
Anthracene	120-12-7	SVHC
Fluoranthene	206-44-0	SVHC
Phenanthrene	85-01-8	SVHC
Pyrene	129-00-0	SVHC
Anthracene oil	90640-80-5	SVHC
Anthracene oil fraction (a complex combination of the distillation of Anthracene)	91995-17-4	SVHC
Anthraceneoil, Athracene paste, Anthracene fraction	91995-15-2	SVHC
Anthracene oil, Anthracene-low	90640-82-7	SVHC
Anthracene oil, Anthracene paste	90640-81-6	SVHC

**Annex 4 - Chlorinated solvents**

Substances	CAS-RN	Legal status
Chloroform	67-66-3	Restricted
1,1 dichlorethane	75-34-3	Not regulated
1,2 dichlorethane	107-06-2	Restricted
1,1,2 Trichloroethane	79-00-5	Restricted
1,1,2,2 Tetrachloroethane	79-34-5	Restricted
1,1,1,2 Tetrachloroethane	630-20-6	Restricted
Pentachloroethane	76-01-07	Restricted
Hexachloroethane	67-72-1	Restricted
1,1 Dichloroethylene	75-35-4	Restricted
1,4-dichlorobenzene	106-46-7	Restricted
Carbon tetrachloride	56-23-5	Restricted
1,1,1 Trichloroethane	71-55-6	Restricted
$\alpha,\alpha,\alpha,4$ -tetrachlorotoluene;	5216-25-1	Restricted
p-chlorobenzotrichloride	5216-25-1	Restricted
$\alpha,\alpha,\alpha$ -trichlorotoluene; benzotrichloride	98-07-07	Restricted
$\alpha$ -chlorotoluene; benzyl chloride	100-44-7	Restricted
Trichloroethylene	79-01-6	SVHC
Tetrachloroethylene	127-18-4	Not regulated
1,2,3-trichloropropane	96-18-4	SVHC
Pentachloroethane	76-01-7	Restricted
Chloroform	67-66-3	Restricted
1,1,2 Trichloroethane	79-00-5	Restricted
1,1,2,2 Tetrachloroethane	79-34-5	Restricted
1,1,1,2 Tetrachloroethane	630-20-6	Restricted
Pentachloroethane	0076-01-07	Restricted
1,1 Dichloroethylene	75-35-4	Restricted
1,4-dichlorobenzene	106-46-7	Restricted
Carbon tetrachloride	56-23-5	Restricted
1,1,1 Trichloroethane	71-55-6	Restricted
$\alpha,\alpha,\alpha,4$ -tetrachlorotoluene;	5216-25-1	Restricted
p-chlorobenzotrichloride	5216-25-1	Restricted
$\alpha,\alpha,\alpha$ -trichlorotoluene; benzotrichloride	0098-07-07	Restricted
$\alpha$ -chlorotoluene; benzyl chloride	100-44-7	Restricted
Trichloroethylene	79-01-6	SVHC
1,2,3-trichloropropane	96-18-4	SVHC
1,2 dichlorethane	107-06-2	Restricted, Prop 65
Methylene chloride	75-09-2	Restricted, Prop 65

**Annex 5 - Allergenic dyes**

Substances	CAS RN	Legal status
C.I. Disperse Yellow 1	119-15-3	
C.I. Disperse Blue 35	12222-75-2	Restricted
C.I. Disperse Blue 102	12222-97-8	
C.I. Disperse Blue 106	12223-01-7, 68516-81-4	
C.I. Disperse Yellow 39	12236-29-2	
C.I. Disperse Orange 37/59/76	13301-61-6	
C.I. Disperse Brown 1	23355-64-8	
C.I. Disperse Blue 3	2475-46-9	
C.I. Disperse Orange 1	2581-69-3	
C.I. Disperse Yellow 3	2832-40-8	
C.I. Disperse Red 11	2872-48-2	
C.I. Disperse Red 1	2872-52-8	
C.I. Disperse Red 17	3179-89-3	
C.I. Disperse Blue 7	3179-90-6	
C.I. Disperse Blue 26	3860-63-7,	
C.I. Disperse Yellow 49	54824-37-2,	
C.I. Disperse Blue 124	61951-51-7	Restricted
C.I. Disperse Yellow 9	6373-73-5	
C.I. Disperse Orange 3	730-40-5	
Navy Blue	405-665-4 (EC #)	
C.I Disperse Blue 1	2475-45-8	Restricted
Disperse Yellow 64	10319-14-9	
Disperse Violet 93	122463-28-9	
CI Disperse Yellow 23	6250-23-3	
CI Disperse Violet 1	128-95-0	
CI Disperse Blue 291	56548-64-2	
CI Disperse Orange 149	85136-74-9	



**Annex 6 - Banned arylamines derived from certain azo dyes**

Substances	CAS RN	Legal status
4,4-Methylene-bis[2-chloro-aniline]	101-14-4	SVHC and restricted
4,4-Methylenedianiline	101-77-9	SVHC and restricted
4,4'-oxydianiline	101-80-4	SVHC and restricted
4-chloroaniline	106-47-8	Restricted
o-Dianisidine	119-90-4	Restricted
4,4'-bi-o-toluidine	119-93-7	Restricted
p-Cresidine	120-71-8	Restricted
2,4,5-trimethylaniline	137-17-7	Restricted
4,4'-thiodianiline	139-65-1	Restricted
4-Aminoazobenzene	60-09-3	SVHC and restricted
4-methoxy-m-phenylenediamine	615-05-4	Restricted
4,4-Methylenedi-o-toluidine	838-88-0	SVHC and restricted
2,6-xylidine	87-62-7	Restricted
o-Anisidine	90-04-0	Restricted
2-Naphthylamine	91-59-8	Restricted
3,3-Dichlorobenzidine	91-94-1	Restricted
Biphenyl-4-ylamine	92-67-1	Restricted
Benzidine	92-87-5	Restricted
o-Toluidine	95-53-4	Restricted
2,4-xylidine	95-68-1	Restricted
4-Chloro-o-toluidine	95-69-2	Restricted
4-methyl-m-phenylenediamine	95-80-7	Restricted
o-Aminoazotoluene	97-56-3	Restricted
5-Nitro-o-toluidine	99-55-8	Restricted
4-chloro-o-toluidinium chloride	3165-93-3	Restricted
2-Naphthylammoniumacetate	553-00-4	Restricted
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisoole sulphate	39156-41-7	Restricted
2,4,5-trimethylaniline hydrochloride	21436-97-5	Restricted
p-phenylenediamine	106-50-3	20 mg/kg
Aniline	62-53-3	20 mg/kg

**Annex 7 - CMR dyestuffs**

Substances	CAS RN	Legal status
C.I. Direct Brown 95	16071-86-6	
C.I. Direct Black 38	1937-37-7	SVHC
C.I. Disperse Blue 1	2475-45-8	Restricted
C.I. Direct Blue 6	2602-46-2	
C.I. Acid Red 26	3761-53-3	
C.I. Basic Red 9	569-61-9	
C.I. Direct Red 28	573-58-0	SVHC
C.I. Basic Violet 14	632-99-5	
C.I. Disperse Orange 11	82-28-0	
C.I. Disperse Orange 149	85136-74-9	
C.I. Solvent Blue 4	6786-83-0	SVHC
C.I. Basic Blue 26,	2580-56-5	SVHC
C.I. Basic Violet 3	548-62-9	SVHC and restricted
Michler's base	101-61-1	SVHC
Michler's ketone	90-94-8*	SVHC
C.I. Disperse Yellow 3	2832-40-8	
Acid red 114	6459-94-5	
Direct blue 15	2429-74-5	
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	SVHC

**Annex 8 - Legal status Formaldehyde**

<b>Formaldehyde regulations within EU/EEA.</b>		
<b>Country</b>	<b>Regulations/Requirements</b>	<b>Objection Limit / Limit</b>
Germany	Gefahrstoffverordnung (Hazardous Substances Ordinance) Annex III, No. 9, 26.10.1993	Textiles that normally come into contact with the skin and release more than 1500 mg/kg formaldehyde must bear the label: "Contains formaldehyde". Washing this garment is recommended prior to first time use in order to avoid irritation of the skin."
France	Official Gazette of the French Republic, Notification 97/0141/F	The regulations apply to products that are intended to come into contact with human skin, Including: textiles, leather, shoes etc. Textiles for babies: 20 mg/kg. Textiles in direct skin contact: 100 mg/kg. Textiles not in direct skin contact: 400 mg/kg.
Netherlands	The Dutch (Commodities Act) Regulations on Formaldehyde in Textiles (July 2000)	Textiles in direct skin contact must be labelled: "Wash before first use" if they contain more than 120 mg/kg formaldehyde and the product must not contain more than 120 mg/kg formaldehyde after wash.
Austria	Formaldehydverordnung, BGBl Nr. 194/1990	Textiles that contains 1500 mg/kg or above must be labelled.
Finland	Decree on Maximum Amounts of Formaldehyde in Certain Textiles Products (Decree 210/1988)	Textiles for babies under 2 years: 30 mg/kg. Textiles in direct skin contact: 100 mg/kg. Textiles not in direct skin contact: 300 mg/kg.
Norway	Regulations Governing the Use of a Number of Chemicals in Textiles (April 1999)	Textiles for babies under 2 years: 30 mg/kg. Textiles in direct skin contact: 100 mg/kg. Textiles not in direct skin contact: 300 mg/kg.

Formaldehyde regulations outside EU/EEA		
Country	Regulations/Requirements	Objection Limit / Limit
Eurasian Customs Union (Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia)	<p>Technical Regulation on the, TP TC 007/2011 On “Safety of Products intended for children and adolescents”, enacted in 2011 and its amendment “Decision № 51 (28 April 2017)”, enacted in 2017. “TP TC 017/2011 On Safety of Light Industry Products enacted in 2011 and its amendment “Decision № 60 (9 August 2016)” enacted in 2016. GOST 30386-95 (Textiles. Maximum permissible concentrations of free formaldehyde)</p> <p>GOST 50729-95 (Textiles. Limit permissible concentration of free formaldehyde)</p>	<p>Mass fraction of free Formaldehyde babies up to 36 months: 20 mcg/g for 1st and 2nd layer of products and 300 mcg/g for 3rd layer</p> <p>Mass fraction of free Formaldehyde for children and adolescents: 75 mcg/g for 1st and 2nd layer of products and 300 mcg/g for 3rd layer</p> <p><i>Apply less than 20 mg free formaldehyde/kg as a customs requirement.</i></p>

**Annex 9 - Flourochemicals (PFAS)**

Substances	Acronym	CAS RN
<b>PFSA (perfluorinated sulfonic acids) related substances</b>		
Perfluorooctane sulfonate	PFOS	1763-23-1
Perfluorooctanesulfonamide	PFOSA	754-91-6
N-Methyl-Perfluorooctanesulfonamide	N-Me-FOSA	31506-32-8
N-Ethyl-Perfluorooctanesulfonamide	N-Et_FOSA	4151-50-2
N-Methyl-Perfluorooctanesulfonamidoethanol	N-Me-FOSE	24448-09-7
N-Ethyl-Perfluorooctanesulfonamidoethanol	N-Et-FOSE	1691-99-2
Perfluorohexane sulfonate	PFHxS	355-46-4
Perfluorobutane sulfonate	PFBS	375-73-5
<b>PFCA (perfluorinated carboxylic acids) related substances</b>		
Perfluorooctane acid	PFOA	335-67-1
Perfluorobutanoic acid	PFBA	375-22-4
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUnA	2058-94-8
Heptacosafuorotetradecanoic acid	PFTA	376-06-7
Tricosafuorododecanoic acid	PFDoA	307-55-1
Pentacosafuorotridecanoic acid	PFTTrDA	72629-94-8
Ammonium pentadecafluorooctanoate	APFO	3825-26-1
Sodium perfluorooctanoate	Na-PFO	335- 95-5
Potassium perfluorooctanoate	Ca-PFO	2395-00-8
Silver perfluorooctanoate	Ag-PFO	335-93-3
Perfluorooctanoyl fluoride	F-PFO	335-66-0
Methyl pentadecafluorooctanoate	Me-PFO	376-27-2
Ethyl perfluorooctanonate	Et-PFO	3108-24-5
<b>Flourtelomers (precursors)</b>		
4:2 fluorotelomer sulfonate	4:2 FTS	757124-72-4
6:2 fluorotelomer sulfonate	6:2 FTS	27619-97-2
8:2 fluorotelomer sulfonate	8:2 FTS	39108-34-4
1H,1H,2H,2H-Perfluorohexanol	4:2 FTOH	2043-47-2
1H,1H,2H,2H-Perfluoro-1-octanol	6:2 FTOH	647-42-7
1H,1H,2H,2H-Perfluoro-1-decanol	8:2 FTOH	678-39-7
1H,1H,2H,2H-Perfluorododecane-1-ol	10:2 FTOH	865-86-1
1H,1H,2H,2H-Perfluorooctylacrylat	6:2 FTA	17527-29-6
1H,1H,2H,2H-Perfluorodecylacrylat	8:2 FTA	27905-45-9
1H,1H,2H,2H-Perfluorododecylacrylat	10:2 FTA	17741-60-5
3,3,4,4,5,5,6,6,7,7,8,8,8-	6:2 FTMA	2144-53-8
tridecafluorooctyl methacrylate		

## Annex 10 - Legal status PFAS

PFAS substances, their salts and related substances	CAS	Abbr.	SVHC	REACH annex XVII	EU POP regulation	Stockholm Convention
Perfluorobutane sulfonate	375-73-5	PFBS	Yes			
Perfluorohexane sulfonate	355-46-4	PFHxS	Yes	Ongoing		Yes
Perfluorohexanoic acid	307-24-4	PFHxA	Yes	Ongoing		
Perfluorooctane sulfonate	307-34-6	PFOS			Yes	Yes
Perfluorononanoic acid and its sodium ammonium salts,	375-95-1 21049-39-8, 4149-60-4	PFNA	Yes	Yes		Ongoing
Perfluorodecanoic acid its sodium and ammonium salts,	335-76-2 3108-42-7 3830-45-3	PFDA	Yes	Yes		Ongoing
Pentacosafuoro tridecanoic acid	72629-94-8	PFTTrDA	Yes	Yes		Ongoing
Tricosafuoro dodecanoic acid	307-55-1	PFDaA	Yes	Yes		Ongoing
Henicosafuoro undecanoic acid	2058-94-8	PFUnA	Yes	Yes		Ongoing
Heptacosafuoro tetradecanoic acid	376-06-7	PFTA	Yes	Yes		Ongoing
PFAS, C15 – C21	Several					Ongoing
Perfluorooctane acid Ammonium pentadecafluoro octanoate	335-67-1 3825-26-1	PFOA APFO	Yes	Yes Moved to EU POP regulation 2020	Yes Included since 4 July 2020	Yes
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	Several	HPFO-DA.	Yes			
reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	Several		Yes			

PFAS substances, their salts and related substances	CAS	Abbr.	SVHC	REACH annex XVII	EU POP regulation	Stockholm Convention
Broader PFAS regulation	Suggested to cover all compounds that include one or more perfluorinated moieties			Ongoing		

**Annex 11 - Regulated ortho - phthalate esters**

Substance	Abbreviation	CAS RN	Legal status
Bis(2-ethylhexyl) phthalate	DEHP	117-81-7	SVHC and restricted
Dibutyl phthalate	DBP	84-74-2	SVHC and restricted
Benzyl butyl phthalate	BBP	85-68-7	SVHC and restricted
Diisononyl phthalate	DINP	28553-12-0 and 68515-48-0	Restricted
Diisodecyl phthalate	DIDP	26761-40-0 and 68515-49-1	SVHC
Di-n-octyl phthalate	DNOP	117-84-0	Restricted
Diisobutyl phthalate	DIBP	84-69-5	SVHC and restricted
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	DIHP	71888-89-6	SVHC and restricted
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	DHNP	68515-42-4	SVHC
Bis(2-methoxyethyl) phthalate	DMEP	117-82-8	SVHC and restricted
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear		84777-06-0	SVHC
Diisopentyl phthalate	DIPP	605-50-5	SVHC and restricted
N-pentyl-isopentylphthalate	PIPP	776297-69-9	SVHC
Dipentyl phthalate	DPP	131-18-0	SVHC
Dihexyl phthalate	DnHP	84-75-3	SVHC and restricted
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear		68515-50-4	SVHC
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters with $\geq 0.3\%$ of dihexyl phthalate (CAS 84-75-3)		68515-51-5	SVHC
1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (CAS 84-75-3)		68648-93-1	SVHC
Dicyclohexyl phthalate	DCHP	84-61-7	SVHC
Diisohexylphthalate	DIHXP	71850-09-4	SVHC



**Annex 12 - Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)**

Substance	Abbreviation	CAS RN	Legal status
<b>PBBs</b>			
Polybrominated biphenyls	PBB	59536-65-1 (mix)	Restricted
Hexabromobiphenyl	HBB	36355-01-8	Restricted
<b>PBDEs</b>			
Pentabromodiphenyl ether	PentaBDE	32534-81-9, 60348-60-9	Restricted
Octabromodiphenyl ether	OctaBDE	32536-52-0	Restricted
Decabromodiphenyl ether	DecaBDE	1163-19-5	SVHC and restricted
Tetrabromodiphenyl ether	TetraBDE	5436-43-1	Restricted
Heptabromodiphenyl ether	HeptaBDE	207122-16-5, 446255-22-7	Restricted
Hexabromodiphenyl ether	HexaBDE	68631-49-2, 207122-15-4	Restricted

**Annex 13 – Isocyanates**

Substances	CAS RN	Legal status
2,2'-Methylenediphenyl diisocyanate (MDI)	2536-05-2	Restricted
2,4'-Methylenediphenyl diisocyanate (MDI)	5873-54-1	Restricted
4,4'-Methylenediphenyl diisocyanate (MDI)	101-68-8	Restricted
Methylenediphenyl diisocyanate (MDI)	26447-40-5	Restricted
2,4-Toluene diisocyanate (2,4 TDI)	584-84-9	Restricted
m-tolylidene diisocyanate (TDI)	26471-62-5	Restricted
Hexane, 1,6-diisocyanato (HDI)	822-06-0	Restricted
Isophorone diisocyanate (IPDI)	4098-71-9	Restricted
Tetramethylxylene diisocyanate (TMXDI)	2778-42-9	Restricted
Benzene, 1,3-diisocyanato-2-methyl	91-08-7	Restricted

***Assure strict and safe work environment measures in the process***

**Annex 14 – Nitrosamines**

Substances	CAS RN	Legal status
Dimethylnitrosoamine	62-75-9	Sum total: <0,5 mg/kg
N-nitrosodiethylamine (NDEA)	55-18-5	
N-nitrosodipropylamine (NDPA)	621-64-7	
N-nitrosodibutylamine (NDBA)	924-16-3	
N-nitrosopiperidin (NPIP)	100-75-4	
N-nitrosopyrrolidin (NPYR)	930-55-2	
N-nitrosomorpholin (NMOR)	59-89-2	
N-nitroso N-methyl N-phenylamine (NMPPhA)	614-00-6	
N-nitroso N-ethyl N-phenylamine (NEPhA)	612-64-6	

**Annex 15 – Tin organic compounds (Organostannic compounds)**

Substances	CAS RN	Legal status
Tributyltin oxide (TBTO)	56-35-9	SVCH Restricted
Dibutyltin dichloride (DBTC),	683-18-1	
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE),	15571-58-1	
Reaction mass of DOTE and MOTE and Dibutylbis(pentane-2,4-dionato-O,O')tin,	22673-19-4	
dioctyltin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs.	(799-973-9)	
Stannane, dioctyl-, bis(coco acyloxy) derivs.	91648-39-4	
Dioctyltin dilaurate	3648-18-8	

**Annex 16 – Cobalt (Co) and its compounds****Recent adopted restrictions in EU/EEA 2022**

Substances	CAS RN	Legal status
Cobalt Metal Powder	7440-48-4	Prop 65
Cobalt sulphate	10124-43-3	SVHC and restricted, Prop 65
Cobalt dinitrate	10141-05-6	SVHC and restricted
Cobalt di(acetate)	71-48-7	SVHC and restricted
Cobalt carbonate	513-79-1	SVHC and restricted
Cobalt dichloride	7646-79-9	SVHC and restricted

**Annex XVII of Regulation (EC) No 1907/2006 (REACH) for cobalt salts.**

Shall not be manufactured, placed on the market, or used as substances on their own or in mixtures in a concentration.

equal to or above 0.01% by weight (100 mg/kg), unless

safety measures have been taken to limit exposure of any of the cobalt salts to below 0.01% by weight (100 mg/kg) to demonstrate safe use and production.

**Annex 17 - Boric acid, borate compounds****Overview of regulated boric acid, borate compounds**

Substances	CAS RN (EC No)	Legal status
Boric acid;	10043-35-3 and 11113-50-1	SVHC
Disodium tetraborate anhydrous;	1303-96-4, 12179-04-3 and 1330-43-4	SVHC
Tetraboron disodium heptaoxid, hydrate;	12267-73-1	SVHC
Sodium perborate; perboric acid, sodium salt,	(234-390-0)	SVHC
Sodium peroxometaborate,	7632-04-04	SVHC
Disodium octaborate,	12008-41-2	SVHC
Orthoboric acid, sodium salt	13840-56-7	SVHC
Barium diboron tetraoxide	13701-59-2	SVHC

## **Annex 18 - Checklist for laboratories**

### **Introduction**

This routine is to ensure qualified chemical test protocols and test results by selected and by Nilson Group, approved accredited independent test laboratories in selected countries of concern.

If there are published EN or EN ISO or ISO methods available always use that method and clearly report in the test protocol

If other methods are used e.g. in-house test methods, always answer carefully each section below.

In case the applied EN, EN ISO or ISO method is modified by the test laboratory, always report these modified procedures in the test report.

All test reports should be signed by an authorised person at the laboratory.

### **Testing**

For those chemical substances to be tested, where no official international standard test method exists, the test report should include the following:

#### **Sample preparation**

- amount of specimen for preparation, weight and size
- procedure of extraction, solvents used, and equipment used for extraction e.g. Soxhlet

#### **Instrumental performance**

- instrument used e.g GC-MS etc.
- lab specific detection limit(s) where preferably LOQ (limit of quantification) are reported
- standard deviation in analytical results

#### **Other information of importance**

- describe modified procedures from applied established ISO/EN standard methods if available.
- always present test results in mg/kg
- description of the recalculation from mg/kg if the test result is presented in another unit e.g ppm, ppb, ug/kg etc

#### **Instruction to the laboratory**

- always present the actual test result of the analysis and not any letter combinations if not properly described e.g N/A
- if not detected, report always below the actual LOQ (< LOQ) values