



RESTRICTED SUBSTANCES LIST (RSL)

Supplier Commitment

The Supplier acknowledges that all items purchased by any brand of ETAM Group do not contain any prohibited substance or within the strictly regulated proportions detailed in the following document.

By accepting an order, the Supplier fully supports and commits to comply with all the requirements listed in these specifications.

The Supplier commits to approve on the ETAM Group Suppliers portal the Restricted Substances List (RSL)

Chemicals Policy

Today, more than ever, we must act for a respectful fashion. It's one of the Etam Group commitments.

That's why the products of Etam Group Brands must follow a Chemicals policy enabling to achieve a high level of protection of human health and the environment, by reducing environmental impact and eliminate the use of harmful chemicals.

With this aim, the Etam Group has created a Restricted Substances List (RSL), which enumerates the substances which are totally prohibited or tolerated in a certain proportion in its Brands products.

This RSL has been also written to comply with the legislative and regulatory requirements of the global commercial markets in which Etam Group branded products are sold, including REACH and Proposition 65.

This RSL applies to all fabrics, components, products and packaging delivered to an Etam Group Brand.

Concerning releasable substances, in particular all items called cosmetotextile with micro-encapsulation and items as candles, diffusers, soaps, scents ... etc., for which the release of substances is predictable and intentional, you must:

- inform us in advance of the nature of the substances
- provide us with proof of their registration for the defined use of our product with ECHA by you, your exclusive representative in Europe (name to be communicated to us) or by the manufacturer (for the defined use of our product).

As a distributor we are responsible for the products placed on the market.

As a manufacturer and/or importer, we ask you to respect these regulations and our RSL for all our orders, by risk-assessing all materials and products for compliance as part of product development process.

You have to bear in mind that this RSL is likely to be updated twice a year in accordance with regulations updates. As soon as available, the updated RSL will be sent to you and must be applied immediately by your Company.

Consequently, you must approve each new update online using your personal account, so that you confirm us for all items ordered by the ETAM Group:

- the absence of these substances or their presence in authorized proportions,
- the registration by you or by the manufacturer of all releasable substances.

In addition, we reserve the right to ask you for test reports, issued by one of our approved laboratories, carried out for one or more items, in accordance with Etam Group RSL Testing Guide (*see in Product Specification of each Brand*).

When requested, you must provide before shipment the test reports attesting your compliance with our RSL.

Failure to approve or comply with these specifications may lead to the immediate termination of our commercial relations. Moreover, we also reserve the right to claim damages from you for the loss incurred.

ETAM Group Restricted Substances List

Substance	CAS#	Etam Group Requirement	Test Method	Potential uses
Substances of Very High Concern (SVHC)				
Substances of Very High Concern (SVHC) according last published ECHA list (REACH regulation (EU))	Various	< 0,1% weight/weight (each)	SVHC screening	No SVHC must be present above 0,1% weight by weight in products supplied to an ETAM Group brand. The SVHC list is updated every 6 months
	SVHC list			
Acetophenone and 2-Phenyl-2-Propanol				
Acetophenone	98-86-2	< 50 ppm (each)	Extraction in acetone or methanol GC/MS, sonication for 30 minutes at 60° C	Potential use in EVA foam when using certain crosslinking agents.
2-Phenyl-2-Propanol	617-94-7			
Acidic and Alkaline Substances				
pH		<u>Textile</u> : 4,5 < x < 7,5 <u>Leather</u> : 3,5 < x < 7,5	<u>Textile</u> : ISO 3071 <u>Leather</u> : ISO 4045	The pH test makes it possible to identify the residual presence of chemical compounds on textile items likely to alter the pH, in order to limit the risks of irritation as much as possible.
Alkylphenols (APs) / Alkylphenols Ethoxylates (APEOs)				
Nonylphenol (NP) + mixed isomers	various	Total APs < 10 ppm Total APs + APEOs < 100 ppm	EN ISO 21084	APEOs can be used as or in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings. APs are used as intermediaries in the manufacture of APEOs and antioxidants used to protect or stabilize polymers.
Octylphenol (OP) + mixed isomers	various		EN ISO 21084	
Nonylphenol Ethoxylates (NPEOs)	various		EN ISO 18254-1 <u>for Leather</u> :	
Octylphenol Ethoxylates (OPEOs)	various		Sample prep and analysis using EN ISO 18218-1	
Azo-amines and Arylamine Salts				
Azo Dyes	24 Subs. (Annex 1)	< 20 ppm (each)	<u>Textile</u> : ISO 14362-1 & -3	Commonly used as dyes in the textile and clothing industry, azo dyes can release carcinogenic aromatic amines as they degrade.
Arylamine salts	4 Subs. (Annex 2)	for mixed tests: 2 parts : ND 3 parts : ND	<u>Leather</u> : ISO 17234-1 & -2	Arylamine salts are substances derived from azo dyes
Bisphenols				
Bisphenol-A (BPA)	80-05-7	< 1 ppm	<u>Leather</u> : EN ISO 11936:2023 <u>All other materials</u> : LC/MS	BPA may be used in the production of epoxy resins, polycarbonate plastics, flame retardants, and PVC. BPS may be used as a substitute for BPA, including in thermal receipt paper. BPS and BPF can be found in polyamide dye-fixing agents and in sulfone- and phenol- based leather synthetic tanning agents. BPA and BPS can be found in recycled polymeric and paper materials
Bisphenol S (BPS)	80-09-1	< 1000 ppm		
Bisphenol B (BPB)	77-40-7	< 1000 ppm		
Bisphenol F (BPF)	620-92-8	< 1000 ppm		
Chlorinated Paraffins				
Short Chain Chlorinated Paraffin (SCCP)	85535-84-8	< 50 ppm	<u>Leather</u> : ISO 18219-1 <u>Other materials</u> : ISO 22818	SCCP/MCCPs are used as flame retardants or plasticisers in plastics, rubbers, inks, paints, adhesives and coatings. They may also be found as impurities in fat-liquoring agents in leather production.
Medium Chain Chlorinated Paraffin (MCCP)	85535-85-9	< 1000 ppm	<u>Leather</u> : ISO 18219-2 <u>Other materials</u> : ISO 22818	

Substance	CAS#	Etam Group Requirement	Test Method	Potential uses
Heavy Metals <i>(continued)</i>				
Arsenic	7440-38-2	< 100 ppm	<u>Leather</u> : EN ISO 17072-2 <u>Other materials</u> : EN 16711-1	<u>Arsenic</u> : used in preservatives, pesticides, and defoliants for cotton, synthetic fibers, paints, inks, trims, and plastics.
Cadmium	7440-43-9	< 40 ppm for mixed tests : ND	<u>Leather</u> : EN ISO 17072-2 <u>Other materials</u> : EN 16711-1	<u>Cadmium</u> : used in stabilizers or in pigments for plastics or coatings (PVC, Polyurethane, etc.). Can also be found in fertilizers, biocides and paints.
Chromium VI	18540-29-9	<u>Textile</u> : < 1 ppm <u>Leather</u> : < 3 ppm	<u>Textile</u> : EN 16711-2 with EN ISO 17075-1 if Cr is detected <u>Leather</u> : EN ISO 17075-2 with ageing (ISO 10195)	<u>Chromium VI</u> : used in leather tanning, also in the "after-chroming" process for wool dyeing.
Lead	7439-92-1	Surface coating: < 50 ppm Accessible substrate: < 50 ppm	<u>Metal</u> : CPSC-CH-E1001-08.3 <u>Non-metal</u> : CPSC-CH-E1002-08.3 <u>Surface coating</u> : CPSC-CH-E1003-09.1	<u>Lead</u> : used in alloys, plastics, paints, inks, pigments and surface coatings.
Mercury	7439-97-6	< 0,5 ppm	<u>Leather</u> : EN ISO 17072-2 <u>Other materials</u> : EN 16711-1	<u>Mercury</u> : used in pesticides and as contaminants in caustic soda. Also used in paints and as catalysts in the manufacture of PU and vinyl chloride for use in PVC.
Nickel	7440-02-0	Non Detected (ND)	<u>Uncoated metal articles</u> : EN 1811 + A1 <u>Coated metal articles</u> : EN 12472, EN 1811 + A1	<u>Nickel</u> : used for plating alloys and improving corrosion-resistance and hardness of alloys. Also occurred as impurities in pigments and alloys.
N-Nitrosamines				
Nitrosamines	9 Subs. (Annex 7)	< 0,5 ppm (each)	EN ISO 19577 and confirmation of positive results by LC/MS	Nitrosamines are associated with rubber and latex products, chemical intermediaries and finished cosmetics.
Organotin Compounds				
Organotins	18 Subs. (Annex 8)	<u>TBT/TPHT</u> < 0,5 ppm (each) <u>others</u> < 1 ppm (each)	Tin test first When total > 50ppm check each organotin => CEN ISO/TS 16179 or EN ISO 22744-1	Organotin compounds are mainly used as heat stabilizers for plastics, catalytic agents, industrial biocides and antifouling agents for paints. In textiles, organotins are associated with plastics/rubbers, inks, paint, metallic flakes, PU and heat transfer materials.

Substance	CAS#	Etam Group Requirement	Test Method	Potential uses
Per- and Polyfluoroalkyl Substances (PFAS)				
All PFAS as measured by total organic fluorine	Various (Annex 9)	< 50 ppm	EN 14582 or ASTM D7359	PFAS may be used in commercial water-, oil-, and stain-repellent agents as well as in breathable membranes that remove moisture PFOA & PFOS have been used to provide soil, oil and water resistance to textiles, apparels, leather and footwear. In textile processing, PFOA is also used in polymers like polytetrafluoroethylene (PTFE). In textile processing, PFOS is also used as wetting agents to improve the coverage and penetration of substances, and enhance dyeing and as a binder in non-woven fabrics.
Perfluorooctane Sulfonate (PFOS) and related substances	Various (Annex 9)	< 1 µg/m2 (total)	EN ISO 23702-1 or EN 17681-1 & 17681-2	
Perfluorooctanoic Acid (PFOA) and its salts	Various (Annex 9)	< 25 ppb (total)		
PFOA-related substances	Various (Annex 9)	< 1000 ppb (total)		
Perfluorohexane-1-sulphonic acid (PFHxS) and its salts	Various (Annex 9)	< 25 ppb (total)		
PFHxS-related substances	Various (Annex 9)	< 1000 ppb (total)		
C9-C14 Perfluorocarboxylic acids (PFCAs) and their salts	Various (Annex 9)	< 25 ppb (total)		
C9-C14 PFCA-related substances	Various (Annex 9)	< 260 ppb (total)		
PFHxA and its salts	Various (Annex 9)	< 25 ppb (total)		
PFHxA-related substances	Various (Annex 9)	< 1000 ppb (total)		
Pesticides and Herbicides, Agricultural				
Pesticides	86 Subs. (tbc vs afirm) (Annex 10)	Organic certified: < 0,05 ppm (each) Other: < 0,5 ppm (each)	EN ISO 15913:2003 or EPA 8081/EPA 8151A or BVL L 00.00-34:2010-09	Pesticides may be found in natural fibers, primarily cotton.
Phtalates_				
Phtalates	26 Subs. (Annex 11)	< 100 ppm (total)	Textiles: GC/MS, EN ISO 14389:2014 Other materials: GC/MS Sample preparation for all materials: CPSC-CH-C1001-09.4	Phthalates are plasticizers used in the manufacture of polymers (mainly PVC) and at various stages of the textile production process. Their use improves the malleability of plastics and facilitates their molding by lowering their glass transition temperature. These phthalates are mainly found in the polymer films of textile coatings.
Polycyclic Aromatic Hydrocarbons (PAHs)_				
Polycyclic Aromatic Hydrocarbons (PAH)	24 Subs. (Annex 12)	< 0,5 ppm (each) < 5 ppm (total)	AFPS GS or EN 17132 or ISO 16190	PAHs may be found in rubber, plastics, lacquers and coatings. PAHs are often found in the outsoles of footwear and in printing pastes for screen prints. PAHs can be present as impurities in Carbon Black. They also may be formed from thermal decomposition of recycled materials during reprocessing.
Other Substances				
Quinoline	91-22-5	< 50 ppm	DIN 54231	Quinoline is used in the manufacture of dyes or as a solvent in resins.
Resorcinol	108-46-3	<1000 ppm	TBC	Resorcinol has many industrial uses: tanning; making resins, adhesives; dyes; cosmetics; dyeing and printing fabrics. Resorcinol is also used as an antiseptic, antifungal, and desiccant.

Substance	CAS#	Etam Group Requirement	Test Method	Potential uses
Solvents				
DMAC - N,N-Dimethylacetamide	127-19-5	< 1000 ppm	Textile : EN 17131 Other materials: ISO 16189	DMAC is a solvent that can be used in the spinning of elastane and acrylic fibers.
DMFa – N,N-Dimethylformamide	68-12-2	< 500 ppm		DMFa is a solvent that can be used in the production of acrylic fibers or in toughened polyurethane (PU) coatings.
NMP - N-méthyl-2-pyrrolidone	872-50-4	< 1000 ppm		NMP can be used in the manufacture of synthetic fibers (polymer production, polyester spinning, => gasoline smell), also as a surface treatment for textiles, resins, and metal-coated plastics, or as a paint stripper.
Formamide	75-12-7	< 1000 ppm		Byproduct in the production of EVA foams.
Volatile Organic Compounds (VOC)				
Volatile Organic Compound (VOC): Benzene + list of VOC	71-43-2 + 16 Subs. (Annex 13)	< 5 ppm (Benzene) < 1000 ppm (total others)	general VOC screening: GC/MS headspace 45 minutes at 120° C	VOC are associated with solventbased processes such as solventbased polyurethane coatings and glues/adhesives. They should not be used for any kind of facility cleaning or spot cleaning. Benzene is a solvent used in rubbers, plastics, adhesives, lubricants, etc.

Annexes : Detailed Lists of Substances

Annex 1 : List of Azo Dyes

CAS no.	Substances
92-67-1	Biphenyl-4-ylamine 4-aminobiphényl Xenylamine
92-87-5	Benzidine
95-69-2	4-chloro-o-toluidine
92-59-8	2-naphthylamine
97-56-3	O-aminoazotoluene 4-amino-2',3-dimethylazobenzène 4-o-tolylazo-o-toluidine
99-55-8	5-nitro-o-toluidine
106-47-8	4-chloroaniline
615-05-4	4-methoxy-m-phenylenediamine
101-77-9	4,4-methylenedianiline 4,4'-diaminodiphénylméthane
91-94-1	3,3'-dichlorobenzidine 3,3'-dichlorobiphenyl-4,4'-ylenediamine
119-90-4	3,3'-dimethoxybenzidine O-dianisidine
119-93-7	3,3'-dimethylbenzidine 4,4'-bi-o-toluidine
838-88-0	4,4'-methylenedi-o-toluidine
120-71-8	6-methoxy-m-toluidine p-cresidine
101-14-4	4,4'-methylene-bis-(2-chloro-aniline) 2,2'-dichloro-4,4'-methylene-dianiline
101-80-4	4,4'-oxydianiline
139-65-1	4,4'-thiodianiline
95-53-4	o-toluidine 2-aminotoluene
95-80-7	4-methyl-m-phenylenediamine
137-17-7	2,4,5-trimethylaniline
90-04-0	o-anisidine 2-methoxyaniline
60-09-3	4-amino azobenzene
95-68-1	2,4 xylydine
87-62-7	2,6 xylydine

Annex 2 : List of Arylamine Salts

CAS no.	Substances
3165-93-3	4-chloro-o-toluidinium chloride
553-00-4	2-Naphthylammoniumacetate
39156-41-7	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisoole sulphate
21436-97-5	2,4,5-trimethylaniline hydrochloride

Annex 3 : List of Polychlorinated Phenols

CAS no.	Substances
87-86-5	Pentachlorophenol (PCP)
4901-51-3	2,3,4,5-Tetrachlorophenol (TeCP)
58-90-2	2,3,4,6-Tetrachlorophenol (TeCP)
935-95-5	2,3,5,6-Tetrachlorophenol (TeCP)
15950-66-0	2,3,4-Trichlorophenol (TriCP)
933-78-8	2,3,5-Trichlorophenol (TriCP)
933-75-5	2,3,6 Trichlorophenol (TrCP)
95-95-4	2,4,5-Trichlorophenol (TriCP)
88-06-2	2,4,6-Trichlorophenol (TriCP)
609-19-8	3,4,5-Trichlorophenol (TriCP)

Annex 4 : List of Chlorinated Organic Carriers (COC)

CAS no.	Substances
5216-25-1	α,α,α,4-tetrachlorotoluene
98-07-7	α,α,α-trichlorotoluene
100-44-7	α-chlorotoluene
95-49-8	2-Chlorotoluene
108-41-8	3-Chlorotoluene
106-43-4	4-Chlorotoluene
32768-54-0	2,3-Dichlorotoluene
95-73-8	2,4-Dichlorotoluene
19398-61-9	2,5-Dichlorotoluene
118-69-4	2,6-Dichlorotoluene
95-75-0	3,4-Dichlorotoluene
2077-46-5	2,3,6-Trichlorotoluene
6639-30-1	2,4,5-Trichlorotoluene
76057-12-0	2,3,4,5-Tetrachlorotoluene

CAS no.	Substances
875-40-1	2,3,4,6-Tetrachlorotoluene
1006-31-1	2,3,5,6-Tetrachlorotoluene
877-11-2	Pentachlorotoluene
541-73-1	1,3-Dichlorobenzene
106-46-7	1,4-Dichlorobenzene
87-61-6	1,2,3-Trichlorobenzene
120-82-1	1,2,4-Trichlorobenzene
108-70-3	1,3,5-Trichlorobenzene
634-66-2	1,2,3,4-Tetrachlorobenzene
634-90-2	1,2,3,5-Tetrachlorobenzene
95-94-3	1,2,4,5-Tetrachlorobenzene
608-93-5	Pentachlorobenzene
118-74-1	Hexachlorobenzene
95-50-1	1,2-Dichlorobenzene

Annex 5 : List of Allergenic and Carcinogenic dyes

CAS no.	C.I General name
2475-45-8	C.I Disperse blue 1
2475-46-9	C.I Disperse blue 3
3179-90-6	C.I Disperse blue 7
3860-63-7	C.I Disperse blue 26
12222-75-2	C.I Disperse blue 35
12222-97-8	C.I Disperse blue 102
12223-01-7	C.I Disperse blue 106
61951-51-7	C.I Disperse blue 124
23355-64-8	C.I Disperse brown 1
2581-69-3	C.I Disperse orange 1
730-40-5	C.I Disperse orange 3
82-28-0	C.I Disperse orange 11
1223-33-5	C.I Disperse orange 37
13301-61-6	C.I Disperse orange 76
51811-42-8	C.I Disperse orange 59
85136-74-9	C.I Disperse orange 149
2872-52-8	C.I Disperse red 1
2872-48-2	C.I Disperse red 11
3179-89-3	C.I Disperse red 17
61968-47-6	C.I Disperse red 151
119-15-3	C.I Disperse yellow 1
2832-40-8	C.I Disperse yellow 3

CAS no.	C.I General name
6300-37-4	C.I Disperse yellow 7
6373-73-5	C.I Disperse yellow 9
6250-23-3	C.I Disperse yellow 23
12236-29-2	C.I Disperse yellow 39
54824-37-2	C.I Disperse yellow 49
54077-16-6	C.I Disperse yellow 56
3761-53-3	C.I Acid red 26
569-61-9	C.I Basic red 9
2437-29-8	C.I Basic green 4
548-62-9	C.I Basic violet 3
632-99-5	C.I Basic violet 14
2580-56-5	C.I Basic blue 26
1937-37-7	C.I Direct black 38
2602-46-2	C.I Direct blue 6
16071-86-6	C.I Direct brown 95
573-58-0	C.I Direct red 28
6786-83-0	C.I.Solvent blue 4
60-11-7	C.I.Solvent yellow 2
60-09-3	C.I.Solvent yellow 1
97-56-3	C.I.Solvent yellow 3
561-41-01	4,4'-bis(dimethylamino)-4'''-(methylamino)trityl alcohol

Annex 6 : List of Bromine Flame Retardants			
CAS no.	Substances	Etam Group Limit	Method
84852-53-9	Decabromodiphenyl ethane (DBDPE)	10 ppm	EN ISO 17881-1
40088-47-9	Tetrabromodiphenylether (TetraBDE)	10 ppm	EN ISO 17881-1
32534-81-9	Pentabromodiphenylether (PentaBDE)	10 ppm	EN ISO 17881-1
366483-60-0	Hexabromodiphenylether (HexaBDE)	10 ppm	EN ISO 17881-1
68928-80-3	Heptabromodiphenylether (HeptaBDE)	10 ppm	EN ISO 17881-1
32536-52-0	Diphenylether, octabromo derivative (OctaBDE)	10 ppm	EN ISO 17881-1
1163-19-5	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	10 ppm	EN ISO 17881-1
various	All other Polybrominated diphenyl ether (PBDE)	10 ppm	EN ISO 17881-1
79-94-7	Tetrabromobisphenol A (TBBPA)	10 ppm	EN ISO 17881-1
59536-65-1	Polybromobiphenyls, Polybrominatedbyphenyls (PBB)	10 ppm	EN ISO 17881-1
3194-55-6	Hexabromocyclododecane (HBCDD)	10 ppm (each)	EN ISO 17881-1
	<i>and all major diastereoisomers identified</i>		
134237-50-6	Alpha-hexabromocyclododecane		
134237-51-7	Beta-hexabromocyclododecane		
134237-52-8	Gamma-hexabromocyclododecane		
3296-90-0	2,2-bis(bromomethyl)-1,3- propanediol (BBMP)	10 ppm	EN ISO 17881-1
36355-01-8	Hexabromobiphenyl (HBB)	10 ppm	EN ISO 17881-1
70776-03-3	Polychlorinated Naphtalene (PCN)	10 ppm	EN ISO 17881-1
13674-87-8	Tris(1,3-dichloro-isopropyl) phosphate (TDCPP)	10 ppm	EN ISO 17881-2
25155-23-1	Trixylyl phosphate (TXP)	10 ppm	EN ISO 17881-2
126-72-7	Tris (2,3 dibromopropyl) phosphate (TRIS)	10 ppm	EN ISO 17881-2
545-55-1	Tris(aziridinyl)phosphin oxide (TEPA)	10 ppm	EN ISO 17881-2
115-96-8	Tris(2-chloroethyl)phosphate (TCEP)	10 ppm	EN ISO 17881-2
5412-25-9	Bis(2,3-dibromopropyl)phosphate (BDBPP)	10 ppm	EN ISO 17881-2
13674-84-5	Tris(1-chloro-2-propyl) phosphate (TCPP)	1000 ppm	EN ISO 17881-2
12267-73-1	Tetraboron disodium heptaoxide, hydrate	1000 ppm	total digestion, ICP/MS
10043-35-3	Boric acid	1000 ppm	total digestion, ICP/MS
11113-50-1			
1303-96-4	Disodium tetraborate, anhydrous	1000 ppm	total digestion, ICP/MS
1330-43-4			
12179-04-3			
1303-86-2	Diboron trioxide	1000 ppm	total digestion, ICP/MS

Annex 7 : List of Nitrosamines	
CAS no.	Substances
62-75-9	N-Nitrosodimethylamine (NDMA)
55-18-5	N-Nitrosodiethylamine (NDEA)
621-64-7	N-Nitrosodipropylamine (NDPA)
924-16-3	N-Nitrosodibutylamine (NDBA)
100-75-4	N-Nitrosopiperidine (NPIP)
930-55-2	N-Nitrosopyrrolidine (NPYR)
59-89-2	N-Nitrosomorpholine (NMOR)
614-00-6	N-Nitroso N-methyl N-phenylamine (NMPHA)
612-64-6	N-Nitroso N-ethyl N-phenylamine (NEPhA)

Annex 8 : List of Organotins		
CAS no.	Substances	Etam Group Limit
various	Tributyltin (TBT)	< 0,5 ppm
various	Triphenyltin (TPhT)	< 0,5 ppm
various	Dibutyltin (DBT)	<1 ppm
various	Dioctyltin (DOT)	<1 ppm
various	Monobutyltin (MBT)	<1 ppm
various	Monooctyltin (MOT)	<1 ppm
various	Tricyclohexyltin (TCyHT)	<1 ppm
various	Trimethyltin (TMT)	<1 ppm
various	Trioctyltin (TOT)	<1 ppm
various	Tripropyltin (TPT)	<1 ppm
various	Dimethyltin (DMT)	<1 ppm
various	Diphenyltin (DPhT)	<1 ppm
various	Diisopropyltin (DPT)	<1 ppm
various	Monomethyltin (MMT)	<1 ppm
various	Monophenyltin (MPHT)	<1 ppm
1461-25-2	Tetraethyltin (TeET)	<1 ppm
597-64-8	Tetraethyltin (TeET)	<1 ppm
3590-84-9	Tertaocetyltn (TeOT)	<1 ppm

Annex 9 : List of PFAS	
PFOS and Related Substances	
CAS no.	Substances
1763-23-1	Perfluorooctanesulfonic acid (PFOS)
2795-39-3	Perfluorooctanesulfonic acid, potassium salt (PFOS-K)
29457-72-5	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)
29081-56-9	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)
70225-14-8	Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)
56773-42-3	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)
251099-16-8	Didecyl dimethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)

PFOA and Its Salts	
CAS no.	Substances
335-67-1	Perfluorooctanoic acid (PFOA)
335-95-5	Sodium perfluorooctanoate (PFOA-Na)
2395-00-8	Potassium perfluorooctanoate (PFOA-K)
335-93-3	Silver perfluorooctanoate (PFOA-Ag)
335-66-0	Perfluorooctanoyl fluoride (PFOA-F)
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)

PFOA-related Substances	
CAS no.	Substances
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)
376-27-2	Methyl perfluorooctanoate (Me-PFOA)
3108-24-5	Ethyl perfluorooctanoate (Et-PFOA)
678-39-7	2-Perfluorooctylethanol (8:2 FTOH)
27905-45-9	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)
1996-88-9	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)
27854-31-5	2H,2H-Perfluorodecanoic acid (H2PFDA)
507-63-1	Perfluoro-1-iodooctane
882489-14-7	Tetrabutylphosphonium 2H,2H-Perfluorodecanoate

PFHxS and Its Salts	
CAS no.	Substances
355-46-4	Perfluorohexane Sulfonic acid (PFHxS)
3871-99-6	Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)
55120-77-9	Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)
68259-08-5	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)
82382-12-5	Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)
100597-52-3	Benzyltriphenylphosphonium tridecafluorohexane-1-sulfonate
108427-54-9	N,N,N-Tributylbutan-1-aminium tridecafluorohexane-1-sulfonate
108427-55-0	Tetraethylammonium perfluorohexane sulfonate
1187817-57-7	Tridecafluorohexane-1-sulfonic acid-pyrrolidine
1310480-24-0	4-[[[4-(Diethylamino)phenyl][4-(ethylamino)naphthalen-1-yl]methylidene]-N,N-diethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate
1310480-27-3	4-[[[4-(Dimethylamino)phenyl][4-(ethylamino)naphthalen-1-yl]methylidene]-N,N-dimethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate
1310480-28-4	4-[[[4-(Dimethylamino)phenyl][4-(phenylamino)naphthalen-1-yl]methylidene]-N,N-dimethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate
1329995-45-0	Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate
1329995-69-8	Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate
144116-10-9	Triphenylsulfanium tridecafluorohexane-1-sulfonate
1462414-59-0	1-(Carboxymethyl)-4-(2-[4-[4-(2,2-diphenylethenyl)phenyl]-1H,2H,3H,3aH,4H,8bH-cyclopenta[b]indol-7-yl]ethenyl)quinolin-1-ium tridecafluorohexane-1-sulfonate
153443-35-7	Diphenyliodonium tridecafluorohexane-1-sulfonate
189274-31-5	Tetramethylammonium perfluorohexane sulfonate
202189-84-2	Tert-butylazanium;1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate
213740-81-9	Bis(4-tert-butylphenyl)iodanium tridecafluorohexane-1-sulfonate
341548-85-4	Bis(4-methylphenyl)phenylsulfanium tridecafluorohexane-1-sulfonate
421555-73-9	Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with perfluorohexanesulfonic acid (1:2)

CAS no.	Substances
341035-71-0	Perfluorohexanesulfonic acid, Gallium(3+) salt (3:1)
350836-93-0	Perfluorohexanesulfonic acid, Scandium(3+) salt (3:1)
41184-65-0	Perfluorohexanesulfonic acid, Neodymium(3+) salt (3:1)
41242-12-0	Perfluorohexanesulfonic acid, Yttrium(3+) salt (3:1)
92011-17-1	Cesium perfluorohexanesulfonate
70136-72-0	Perfluorohexanesulfonic acid, Zinc salt
421555-74-0	Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, perfluorohexanesulfonate (1:1)
425670-70-8	Tris(4-tert-butylphenyl)sulfanium tridecafluorohexane-1-sulfonate
70225-16-0	Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)
72033-41-1	Triethylammonium perfluorohexane sulfonate
866621-50-3	Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with perfluorohexanesulfonic acid (1:1)
910606-39-2	(4-Methylphenyl)diphenylsulfanium tridecafluorohexane-1-sulfonate
911027-68-4	{4-[(2-Methylprop-2-enoyl)oxy]phenyl}diphenylsulfanium tridecafluorohexane-1-sulfonate
928049-42-7	Dibenzo[k,η][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)
423-50-7	Perfluorohexylsulfonfyl fluoride
55591-23-6	Perfluorohexylsulfonfyl chloride

PFHxS-related Substances	
CAS no.	Substances
68259-15-4	N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)
41997-13-1	Perfluorohexane sulfonamide (PFHxSA)
50598-28-2	N-[3-(dimethylamino)propyl] tridecafluorohexanesulphonamide
67584-57-0	2-[methyl]([tridecafluorohexyl] sulphonyl)amino[ethyl acrylate)]

C9 – C14 PFCA and Their Salts	
CAS no.	Substances
375-95-1	Perfluorononanoic Acid (PFNA, C9-PFCA)
335-76-2	Perfluorodecanoic Acid (PFDA, C10-PFCA)
2058-94-8	Perfluoroundecanoic Acid (PFUnA, C11-PFCA)
307-55-1	Perfluorododecanoic Acid (PFDoA, C12-PFCA)
72629-94-8	Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)
376-06-7	Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)
172155-07-6	Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)
21049-39-8	Sodium heptadecafluorononanoate
4149-60-4	Perfluorononanoate ammonium salt
21049-38-7	Potassium perfluorononanoate
60871-92-3	Lithium perfluorononanoate
3830-45-3	Sodium nonadecafluorodecanoate
3108-42-7	Perfluorodecanoate ammonium salt
51604-85-4	Potassium perfluorodecanoate
60871-96-7	Sodium perfluoroundecanoate
4234-23-5	Ammonium perfluoroundecanoate
3793-74-6	Ammonium tricosfluorododecanoate

C9 – C14 PFCA-related Substances	
CAS no.	Substances
17741-60-5	1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)
2144-54-9	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)
865-86-1	1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)
34598-33-9	2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)
39239-77-5	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)
120226-60-0	1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)
2043-53-0	1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)
30046-31-2	1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)
335-77-3	Perfluorodecane sulfonic Acid
2806-15-7	Sodium perfluorodecanesulfonate
2806-16-8	Potassium perfluorodecanesulfonate
67906-42-7	Perfluorodecanesulfonic acid ammonium salt
101947-16-4	1H,1H,2H,2H-Perfluorodecyltriethoxysilane
83310-58-1	Potassium 2H,2H,3H,3H-Perfluoroundecanoate
2043-54-1	1H,1H,2H,2H-Perfluorododecyl iodide

PFHxA, Its Salts, and Related Substances	
CAS no.	Substances
307-24-4	Perfluorohexanoic Acid (PFHxA, C6-PFCA)
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)
647-42-7	1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)

Annex 10 : List of Pesticides			
CAS no.	Substances	CAS no.	Substances
93-72-1	2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds; 2,4,5-TP	33213-65-9	Endosulfan Beta
94-75-7	2,4-D	72-20-8	Endrine
93-76-5	2,4,5-T	66230-04-4	Esfenvalerate
135410-20-7	Acetamidiprid	106-93-4	Ethylendibromid
160430-64-8		51630-58-1	Fenvalerate
116-06-3	Aldicarb	Various	Halogenated naphthalenes, including polychlorinated naphthalenes (PCNs)
309-00-2	Aldrine	76-44-8	Heptachlor
86-50-0	Azinphos Methyl	1024-57-3	Heptachlorepoxyde
2642-71-9	Azinphos Ethyl	36355-01-8	Hexabromobiphenyl
4824-87-6	Bromophos-ethyl	118-74-1	Hexachlorobenzene
2425-06-1	Captafol	319-84-6	Hexachlorcyclohexane -alpha
63-25-2	Carbaryl	319-85-7	Hexachlorcyclohexane -beta
510-15-6	Chlorbenzilat	319-86-8	Hexachlorcyclohexane - gamma
57-74-9	Chlordane	105827-78-9	Imidacloprid
6164-98-3	Chlordimeform	138261-41-3	
470-90-6	Chlorfenvinphos	465-73-6	Isodrine
1897-45-6	Chlorthalonil	4234-79-1	Kelevane
210880-92-5	Clothianidin	143-50-0	Kepone
56-72-4	Coumaphos	58-89-9	Lindane (g – HCH)
68359-37-5	Cyfluthrin	121-75-5	Malathion
91465-08-6	Cyhalothrin	94-74-6	MCPA
52315-07-8	Cypermethrin	94-81-5	MCPB
78-48-8	S,S,S-Tributyl phosphorotrithioate (Tribufos)	93-65-2	Mecoprop
52918-63-5	Delatamethrin	10265-92-6	Metamidophos
53-19-0	2,4'-DDD	72-43-5	Methoxychlor
72-54-8	4,4'-DDD	2385-85-5	Mirex
3424-82-6	2,4'-DDE	6923-22-4	Monocrotophos
72-55-9	4,4'-DDE	150824-47-8	Nitenpyram
789-02-6	2,4'-DDT	56-38-2	Parathion
50-29-3	4,4'-DDT	298-00-0	Parathion-methyl
333-41-5	Diazinon	1825-21-4	Pentachloroanisole
1085-98-9	Dichlofuanide	72-56-0	Perthane
120-36-5	Dichlorprop	7786-34-7	Phosdrin/Mevinphos
115-32-2	Dicofol	31218-83-4	Propethamphos
141-66-2	Dicrotophos	41198-08-7	Profenophos
60-57-1	Dieldrine	13593-03-8	Quinalphos
60-51-5	Dimethoate	82-68-8	Quintozene
88-85-7	Dinoseb + its sels & acetate	8001-50-1	Strobane
165252-70-0	Dinotefuran	297-78-9	Telodrine
63405-99-2	DTTB (4, 6-Dichloro-7 (2,4,5-trichlorophenoxy) -2-Trifluoro methyl benz imidazole)	111988-49-9	Thiacloprid
115-29-7	Endosulfan	153719-23-4	Thiamethoxam
959-98-8	Endosulfan Alpha	80001-35-2	Toxaphène (Camphechlor)
		731-27-1	Tolyfluanide
		1582-09-08	Trifluraline

Annex 11 : List of Phtalates	
CAS no.	Substances
68515-51-5	- 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters
71888-89-6	DIHP - 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich
68515-42-4	DHNUP - 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters
68515-50-4	- 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear
84777-06-0	DPP - 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear
68648-93-1	- 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate
85-68-7	BBP - Benzyl butyl phthalate
117-81-7	DEHP - Bis-(2 ethylhexyl)-phtalate
26040-51-7	- Bis(2-ethylhexyl) tetrabromophthalate
117-82-8	DMEP - Bis(2-methoxyethyl) phtalate
84-74-2	DBP - Dibutyl phtalate
84-61-7	DCHP - Dicyclohexyl phtalate
84-66-2	DEP - Diethylphthalate
84-69-5	DIBP - Diisobutyl phtalate
26761-40-0	DIDP - Di-isodecyl phthalate
71850-09-4	DIHxP - Diisohexyl phtalate
28553-12-0	DINP - Di-iso-nonylphthalate
27554-26-3	DIOP - Diisooctyl phthalate
605-50-5	DIPP - Diisopentylphthalate
131-11-3	DMP - Dimethylphthalate
84-75-3	DnHP - Di-n-hexyl phtalate
117-84-0	DNOP - Di-n-octylphthalate
84-76-4	DNP - Dinonyl phthalate
131-18-0	DnPP - Di-n-pentyl phthalate
131-16-8	DPRP - Dipropyl phthalate
776297-69-9	nPIPP - N-pentyl-isopentylphthalate

Annex 12 : List of Polycyclic Aromatic Hydrocarbons (PAH)	
CAS no.	Substances
56-55-3	Benzo[a]anthracene (BaA)
50-32-8	Benzo[a]pyrene (BaP)
205-99-2	Benzo[b]fluoranthene (BbF)
192-97-2	Benzo[e]pyrene (BeP)
205-82-3	Benzo[i]fluoranthene (BfF)
207-08-9	Benzo[k]fluoranthene (BkF)
218-01-9	Chrysene (CHR)
53-70-3	Dibenzo[a,h]anthracene (DBA)
83-32-9	Acenaphthene (ANA)
208-96-8	Acenaphthylene (ANY)
120-12-7	Anthracene (ANT)
191-24-2	Benzo[g,h,i]perylene (BPE)
86-73-7	Fluorene (FLU)
206-44-0	Fluoranthene (FLT)
193-39-5	Indeno[1,2,3-cd]pyrene (IPY)
91-20-3	Naphthalene (NAP)
85-01-8	Phenanthrene (PHE)
129-00-0	Pyrene (PYR)
27208-37-3	Cyclopenta[c,d]pyrene
192-65-4	Dibenzo[a,e]pyrene
189-64-0	Dibenzo[a,h]pyrene
189-55-9	Dibenzo[a,i]pyrene
191-30-0	Dibenzo[a,l]pyrene
2381-21-7	1-Methylpyrene

Annex 13 : List of Volatile Organic Compounds (VOC)	
CAS no.	Substances
71-43-2	Benzene
75-15-0	Carbon Disulphide
56-23-5	Carbon tetrachloride
67-66-3	Chloroform
108-94-1	Cyclohexanone
107-06-2	1,2-Dichloroethane
75-35-4	1,1-Dichloroethylene
100-41-4	Ethylbenzene
76-01-7	Pentachloroethane
630-20-6	1,1,1,2 – Tetra chloroethane
79-34-5	1,1,2,2 -Tetrachloroethane
127-18-4	Tetrachloroethylene (PERC)
108-88-3	Toluene
71-55-6	1,1,1- Trichloroethane
79-00-5	1,1,2- Trichloroethane
79-01-6	Trichloroethylene
1330-20-7	Xylene (ortho-, meta-, para)
108-38-3	
95-47-6	
106-42-3	