Oberalp Group Chemical Policy

SALEWA, DYNAFIT, WILD COUNTRY, POMOCA, EVOLV

Version V, May 2020

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Fluorinated Substances			Change group name from “PFCs” to “Fluorinated Substances”	15; 38
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	various	PFOA-related substances		
Fluorinated Substances	1763-23-1 various	PFOS, PFOS-related substances and its salts	Adding “PFOS-related substances	15
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Tin organic compounds	Several	Dipropyltin coumpounds (DPT)	Addition	20-21
Tin organic compounds	Several	Tetraethyltin compounds (TeET)	Addition	20-21
Alkylphenols (APs) and Alkylphenolethoxylates (APEOs)	80-46-6	p-(1,1-Dimethylpropyl)phenol	Addition according Candidate List of SVHC	29
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Polyaromatic Hydrocarbons (PAHs)	Several	Several	Change limit to 0.5 ppm to substances with ** according to Product Safety Act (ProdSG) GS German Mark	19; 51-52

Solvent	5989-54-8 5989-27-5 8006-64-2	Terpene hydrocarbons L-Limonene Terpene hydrocarbons D-Limonene Turpentine, oil	Addition according to REACh Restriction proposal	53-54

1. INTRODUCTION

1.1. Purpose and Scope

Oberalp Group (hereinafter Oberalp) is committed to protecting the environment and all people who play a part in the manufacturing and use of its products, including the communities along the supply chain.

Oberalp defined this Chemical Policy, hereinafter “Oberalp Chemical Policy”, to manage the implementation of its Restricted Substances List, hereinafter “Oberalp RSL”, which is the complete list of restricted chemicals following this document in Annex I, in order to ban the presence or limit the use of hazardous substances in its products and production.

The first Oberalp RSL was set up in May 2014 and revised in November 2016. The RSL was then used to test and verify compliance of our products, with involvement of suppliers only when necessary. With this fifth improved version of our RSL, Oberalp wants to engage all its suppliers in actively enforcing its chemical requirements.

The purpose of the Oberalp Chemical Policy is to define and illustrate the various chemical restrictions and standards to be followed for materials used in products and for products made for the Oberalp Group brands, as well as the handling and process flow for informing, testing and certifying the compliance with Oberalp standards in regard to potentially existing critical hazardous substances in production.

The document refers to all products of the following brands owned and distributed by the Oberalp Group: SALEWA, DYNAFIT, WILD COUNTRY, POMOCA and EVOLV.

The Oberalp Chemical Policy is an integral part of the Conditions of Purchase agreed between the Supplier and Oberalp Group and shall apply to each and every stage of the production and distribution of all products made for the Oberalp Group. The Oberalp Chemical Policy is mandatory for all products and materials used in the manufacturing of products for Oberalp. This applies to salesman samples, pre-production samples, and all bulk production orders.

Oberalp demands from its business partners to respect the legal standards and the Oberalp Chemical Policy. All business partners shall ensure that materials, products and procedures are fully in line with this policy as well as with local laws regarding the environment and products. Oberalp business partners shall further ensure compliance with these requirements along the supply chain, including any subcontractors, in all stages of manufacturing and transformation of the materials made for products destined to Oberalp.

Complementary to the Oberalp Chemical Policy, the signature of the Conditions of Purchase also outlines each supplier’s obligation to implement the Oberalp Group’s Code of Conduct (CoC). Relative to the Oberalp Chemical Policy, the CoC contains the most important internationally recognized standards on workers’ rights regarding health and safety, and the Social Compliance procedure set up by Oberalp. All suppliers are expected to contribute to the Oberalp Group’s efforts

The Oberalp Chemical Policy does not constitute legal advice and is not a substitute for legal advice. The requirements listed herein are a reference of “best practice standards” but do not necessary reflect the national laws and regulations of all the countries where products are made. It is the responsibility of individual suppliers and factories to ensure compliance with at least all legal requirements relating to restricted-substances laws relevant for those countries.

in monitoring and improving labour standards in their factories, including, when applicable, active cooperation in our partnership with the Fair Wear Foundation.

1.2. Involved Parties and Responsibilities / Liabilities

The Oberalp Chemical Policy aims to have a holistic approach to responsibilities along the supply chain by involving the following parties:

- Nominated material suppliers and connected factories
- Not- nominated material suppliers and / or suppliers of materials sourced locally through the assemblers
- Assembling suppliers and connected factories
- Subcontracted factories
- The management Oberalp's own brands for product research and development, sourcing, and quality.
- Third-party laboratories

Suppliers shall grant compliance with the Oberalp Chemical Policy for the different stages of production. The related testing procedure and actions taken in cases of non-compliance will vary according to the status of product development and production, as well as the gravity of the breach.

All parties involved, nominated and not nominated material suppliers as well as assembling suppliers and their subcontractors, must acknowledge that they received the Oberalp Chemical Policy in written form and confirm that they comply with it by signing the *"Oberalp Chemicals Policy - Declaration of Conformity"* attached to this document. Refusal or failure to comply with these requirements can result in a business relationship review and eventually removing the supplier from the list of approved partners.

2. DEFINITIONS

2.1. Substance

A chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

2.2. Article

An object which during production is given a special shape, surface or design, which determines its function to a greater degree than does its chemical composition (fibers, textile fabrics, buttons, zippers, shoes etc.).

2.3. CAS

A CAS Registry Number is a unique numerical identifier assigned by Chemical Abstracts Service (CAS) to every chemical substance described in the open scientific literature, including organic and inorganic compounds, minerals, isotopes, alloys and non-structurable materials. While there may be various synonyms and different naming conventions for a chemical, there is only one CAS number.

2.4. Use

Means any processing, formulation, consumption, storage, keeping, treatment, filling into containers, transfer from one container to another, mixing, production and distribution of an article or any other utilization.

2.5. Detection Limit (DL)

The method detection limit (MDL) is a measure of the smallest concentration, which can be determined with a specified precision or reproducibility and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

2.6. Limit Value

The intentional use of some chemical substances along the manufacturing chain is not prohibited. The limit value represents the maximum allowable amount/concentration of the respective substances which is allowable in an RSL – compliant product. The Oberalp Chemical Policy defines consumer safety limits for chemical substances in articles.
Concentration limits are applicable to any single part, or homogeneous part, of a product.

2.7. Several

Several means, that the whole substance group is restricted although not all substances that are restricted are explicitly listed. The listed examples represent only those substances which should be considered if substance group is intended for testing.

2.8. Usage Ban

For several chemical substances or substance groups a usage ban is defined. For these substances or substance groups, any intentional use in manufacturing of articles is prohibited. That means that

chemical products (e.g. colorants or textile auxiliaries) used for manufacturing of articles must not intentionally contain these substances or substance groups.
The aim of a usage ban is to avoid the release of harmful substances to the environment and to avoid occurrence in the manufactured article by applying the principle.

The RSL identifies an allowable trace amount of some substances due to unavoidable contamination.

2.9. Usage Range

Usage ranges classify consumer goods according to their consumer safety relevance.
Three usage ranges (A, B, C) are defined, with A being the most stringent category concerning limit values/bans:

- Usage Range A: Next to skin use and baby use (0 to 3 years)
- Usage Range B: Occasional skin contact
- Usage Range C: No skin contact

2.10. ECHA

European Chemicals Agency is an agency of the European Union which manages the technical, scientific and administrative aspects of the implementation of REACH Regulation (EC) No. 1907/2006. ECHA is the driving force among regulatory authorities in implementing the EU's ground-breaking chemicals legislation for the benefit of human health and the environment as well as for innovation and competitiveness. ECHA helps companies to comply with the legislation, advances the safe use of chemicals, provides information on chemicals and addresses chemicals of concern. It is located in Helsinki, Finland.

3. THE OBERALP RESTRICTED SUBSTANCES LIST

The Oberalp RSL, which is shown in the following pages, is based on the EU (REACh Reg. 1907/2006) and extra-EU legal regulations (such as the US Consumer Product Safety Act (chemical policy SC) on the import and distribution of articles.

The Oberalp RSL goes beyond those requirements for certain substances by taking into consideration mainly the requirements set by the bluesign® system, the Ökotex Standard 100, and includes other substances deemed of high concern by scientists and other relevant stakeholders.

Oberalp revises its RSL periodically and provides the updated version to the supplier annually .

3.1. REACH Regulation

The REACH Regulation (EC 1907/2006), came into force on 1 June 2007. As a European Union (EU) regulation, REACH applies directly in all Member States without the need for transposition into national legislation. It assigns the responsibility of demonstrating product safety onto those who place products on the EU market.

There are three main control instruments foreseen by REACH:

i. **Registration** – the main objective is to collect chemical information on the chemicals that are on the EU market in order to implement the correct management measures of the hazards and risks associated with these chemicals.
ii. **Restriction** – it restricts the marketing, use and placing on the market of certain hazardous chemicals as substances, mixtures or parts of an article.
iii. **Authorization** – objective is to eliminate or effectively control risks from chemicals that are of particular concern, substances of very high concern (SVHCs). Authorization is a process divided into different stages (Candidate List, Authorization List, communication, notification and sunset date) and each stage requires different actors in a supply chain to carry out certain obligations.

All articles produced for Oberalp must be compliant with all the requirements from the three main instruments in REACH: Registration, Restriction and Authorization.

REACH Instrument	Registration	Restriction	Authorization		
Chemical List	–	Annex XVII	Candidate List		Annex XIV
Obligation	Registration	Restriction	Communication	Notification	Authorization
Legal Basis	Article 7(1)	Article 67	Article 33	Article 7(2)	Article 56
Substances Concerned	Substances intended to be released from articles	Substances included in Annex XVII	Substances included in the Candidate List	Substances included in the Candidate List	Substances included in Annex XIV
Concentration Threshold in Article	–	As per restriction condition	0.1% (w/w)	0.1% (w/w)	–
Tonnage Threshold	1 ton / year	–	–	1 ton / year	–
Entry into Force	1 June 2008	1 June 2009	28 Oct 2008	1 June 2011	1 June 2009
Who has responsibilities?	• Article producers • Article importers	• Article producers • Article importers	Article suppliers (ie producer, importer, distributor, retailer)	• Article producers • Article importers	Article producers
Information to be submitted to…	- ECHA	–	• Recipient of the product • Consumer upon request within 45 days	- ECHA	- - ECHA
Are there exemptions to the obligation?	Yes	No	No	Yes	Yes

4. OBERALP RESTRICTED SUBSTANCES LIST

The Oberalp Restricted Substances List (RSL) consists of:

- substance groups
- substance limits in mg/kg (ppm) for three usage ranges: A, B, C
- recommended sample preparation and test methods

The following table shows the general substance groups. Annex I in addition contains the complete list of all single substances included in each substance group.

There are three limits, A, B and C, which specify the allowed chemical concentration for different types of material usage: specifically the level of skin contact and if it is intended for children.

Limit levels:

A: Next to skin and baby use (0 to 3 years)
B: Occasional skin contact
C: No skin contact

SUBSTANCE GROUP	**Limit [mg/kg]**			**Recommended SaMPLE PREPARATION / Test Method**
	A	**B**	**C**	
Aldehydes				
Formaldehyde (CAS 50-00-0)	15	75	300	Textile: ISO 14184 (DL 5) Leather: ISO 17226 (DL 5)
Acetaldehyde (CAS 75-07-0)	10	10	100	Derivatization/ HPLC
Alkylphenols (APs) and **Alkylphenolethoxylates (APEOs)**	**Usage ban** 10 for each Alkylphenol 100 for each Alkylphenolethoxylate			Textile: ISO 18254-1 (DL 1) Leather: ISO 18218-1 (DL 1)
Amines	100			Extraction with MeOH // GC-MS

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Arylamines	**Usage ban** 20			Textile: EN 14362 (DL 5) UNI EN ISO 16373-2 Leather: EN ISO 17234 (DL 5)
Asbestos	**Usage ban not detected**			REM/EDX BGI 505-46 or U.S. EPA/600/R-93/116
Biocide	**Usage ban**			Solvent Extraction // HPLC-UV
Chlorinated Benzenes and Toluenes	**Usage ban** 1.0 for each Sum of all: 5.0			DIN 54232 (DL 0.1) ISO 17137 (DL 0.1)
Chlorinated Phenols	**Usage ban** 0.05 for each			Textile : UNI 11057 (DL 0.05) Leather ISO 17070 (DL 0.05)
Colorants	**Usage ban**			DIN 54231 (DL 5)
Colorants with carcinogenic potential	20			
Colorants with allergenic potential	20			
Colorants banned for other reasons	20			
Colorant marked with *	Banned			
Dioxines and Furanes				
Group 1	Sum of group 1: 1.0 [µg/kg]			EPA 8290A
Group 2	Sum of group 1 and 2: 5.0 [µg/kg]			
Group 3	Sum of group 1, 2 and 3: 100 [µg/kg]			
Group 4	Sum of group 4: 1.0 [µg/kg]			

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Group 5	Sum of group 4 and 5: 5.0 [µg/kg]			
Flame retardants	**Usage ban** 5.0 for each			ISO 17881-2
Fluorinated Greenhouse Gases	**Usage ban** 0.1 for each			Headspace GC-MS
Phenylmercury Compounds	**100**			EN 16711-2 (textile) EN 17072-1 (leather)
Fluorinated Substances				
PFOA, PFOA-related substances and its salts	**Usage ban** (traces 25 ppb for PFOA and 1000 ppb for related substances)			CEN/TS 15968 (DL 1) ISO 23702-1 (leather)
PFOS, PFOS-related substances and its salts	**Usage ban**			
≥C6-based perfluorocarboxylic'acids (PFCAs)	**Usage ban**			
≥C5-based perfluoroalkyl'sulfonates (PFSAs)	**Usage ban**			
PFBS	**1**			
*Ban on long-chain compounds in manufacturing based on long-chain electrofluorination chemistry (C6 and higher). **Phase-out of long-chain compounds in manufacturing based on long-chain telomer chemistry (C8 and higher).				
pH	Textiles: 4.0 - 7.5 Leather: 3.5 - 7.0			Textiles: EN ISO 3071:2006 Leather: EN ISO 4045:2008
Glycols	5.0 for each			Textile: Extraction with MeOH // GC-MS

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
				Plastic: 2-Step extraction with THF and MeOH // GC-MS
Halogenated Biphenyls, halogenated Terphenyls, halogenated Naphthalenes	1.0 5.0 (PBBs)			ISO 17881-1
Halogenated Diarylalkanes	1.0			Extraction following IEC 62321-6 (2015) // GC-MS
Isocyanates	Free content Sum of all: 1.0			EN 13130-8 (DL 0.25)
Monomers: Acrylamide (CAS 79-06-1) Propylene oxide (CAS 75-56-9) Vinylidene chloride (CAS 75-35-4) Vinylchloride Monomer VCM (CAS 75-01-4)	1.0	1.0	1.0	DIN EN ISO 6401 (DL 0.5)
Nitrosamine	**Usage ban** 0.5			GB/T 24513 or prEN 19577
Other Chemical Substances				
Acetophenone (CAS 98-86-2)	20	20	20	Extraction with MeOH // GC-MS
Benzyl Cloride (CAS 100-44-7)	1	1	1	Solvent extraction // GC-MS
Bisphenol A (CAS 80-05-7)	**Usage ban** 1.0 Accessories: 50			Extraction with MeOH // ISO 18857-2 (DL 0.1)
Boric Acid (CAS 10043/35/3 // 11113/50/1)	**Usage ban** 10			ICP-OES or ICP-MS
Diboron Trioxide (CAS 1303-86-2)	100			ICP-OES or ICP-MS
Disodium tetraborate, anhydrous (CAS 1303-96-4)	100			ICP-OES or ICP-MS

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Sodium perborate (CAS 15120-21-5)	100			ICP-OES or ICP-MS
Sodium perborate, anhydrous (CAS 7632-04-4)	100			ICP-OES or ICP-MS
Styrene (CAS 100-42-5)	10			Solvent Extraction / HPLC-MS or GC-MS
tetraboron disodium heptaoxide, hydrate (CAS 12267-73-1)	100			ICP-OES or ICP-MS
Cresol, all isomers (CAS 1319-77-3)	**Usage ban** 10			Extraction with KOH* // GC-MS* *In case of results close to limit value (+/- 10 %) re-test with reference method: §64 LFGB BVL B 82.02-8 (2001) (for textiles) or ISO 17070 (2015) (for leather)
m-Cresol (CAS 108-39-4)				
o-Cresol (CAS 95-48-7)				
p-Cresol (CAS 106-44-5)				
Ciclohexanone (CAS 108-94-1)	10	10	10	Solvent extraction // GC-MS
Dimethylfumarate (CAS 624-49-7)	**Usage ban** 0.1			ISO/TS 16186 (DL 0.02)
1,4-Dioxane (CAS 123-91-1)	1	5	10	Solvent extraction // GC-MS
Ethylbenzene (CAS 100-41-4)	50	50	50	Solvent extraction // GC-MS
Formamide (CAS 75-12-7)	50	50	100	Extraction with MeOH* // GC-MS (DL 5) *Cut the samples into small pieces (2x2mm)
Formaldehyde oligomeric reaction product with aniline (polymeric MDA, MDA technical grade) (CAS 25214-70-4)	**Usage ban**			Solvent extraction // GC-MS
2-Phenyl-2-propanol (CAS 617-94-7)	1.0	10	10	Extraction with MeOH // GC-MS
Quinoline (CAS 91-22-5)	50			Extraction with Methanol or THF // HPLC-MS/MS or HPLC-DAD
Decametilcyclopentasilossano (D5) (CAS 541-02-6)	500			ASE with Acetone/Hexane // GC-MS

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Disodio ottaborato (CAS 12008-41-2)	500			
Dodecametilicloesasilossano (D6) (CAS 540-97-6)	500			
Octamethylcyclotetrasiloxane (D4-Siloxane) (CAS 556-67-2)	500			
Isoquinoline (CAS 119-65-3)	Usage ban // Traces: 50 Valid from July 2021			Extraction with Methanol or THF // LC-MS/MS or LC-DAD
Phenol (CAS 108-95-2)	100			Extraction with MeOH // GC-MS or LC-MS
terphenyl hydrogenated (CAS 61788-32-7)	1000			
Cadmium Carbonate (CAS 513-78-0)	1000			
Cadmium hydroxide (CAS 21041-95-2)	1000			
Cadmium nitrate (CAS 10325-94-7)	1000			
1,3-propanesultone (CAS 1120-71-4)	1000			
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (CAS 15571-58-1)	1000			
cadmium fluoride (CAS 7790-79-6)	100			
cadmium sulphate (CAS 10124-36-4)	100			
Cadmium chloride (CAS 10108-64-2)	100			
Cadmium sulphide (CAS 1306-23-6)	100			
4-tert-butylphenol (CAS 98-54-4)	1000			

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Butyl methacrylate (CAS 97-88-1)	100			Headspace GC-MS (for acrylates) Extraction with MeOH // LC-MS (for acids)
Epichlorohydrin (CAS 106-89-8)	100			CEN/TS 13130-20 (2005)
Aniline (CAS 62-53-3)	100			Extraction with MeOH // LC-MS
Pentanedial - [glutaraldehyde] (CAS 111-30-8)	100			
Mercaptobenzothiazole and salts (CAS 149-30-04)	Ban (DL 5)	200	200	DIN EN ISO 105-E04 (2013) (acidic sweat solution) // LC-MS
Colophony (Rosin) (CAS 8050-09-7)	Ban (DL 1)			Extraction with MTBE, derivatisation // GC-MS
Ozone Depleting Substances	**Usage ban** for direct use in manufacturing of articles 0.1			Headspace GC-MS
Pesticides	**Usage ban** 0.5 applies to sum of pesticides			ISO 15913/DIN 38407 F2 or EPA 8081/EPA 8151A BVL L 00.00- 34:2010-09 Leather: ISO/DIS 22517 (DL 0.05)
Plasticizers **(*Phalathes under Annex XIV of REACh are banned)**	**Usage ban *** 50 for each DEHA monitoring			ISO 14389 (DL 5) CPSC-CH-C1001-09 (DL 5)
Polyaromatic Hydrocarbons (PAHs)	**Usage ban** 10 Sum of all PAHs 0.2			EPA 8310 (DL 0.2) EPA 8270D (DL 0.2) EPA 8275A (DL 0.2)

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
	Benzo(a)pyrene 1.0 PAHs marked with (*) 0.5 PAHs marked with (**)			AfPS GS 2014:01 (DL 0.2)
Polymers				
Polyvinyl chloride (PVC) (CAS 9002-86-2)	**Usage ban for A and B** Not detected			FTIR *FTIR measurement only if result of Beilstein test was positive
Solvents	1.0			DL 0.05
Tin organic compounds	**Usage ban**			ISO/TS 16179 (DL 0.1) ISO 17353 (DL 0.1)
Monomethyltin compounds (MMT)	2.0			
Monobutyltin compounds (MBT)	1.0			
Monooctyltin compounds (MOT)	2.0			
Dimethyltin compounds (DMT)	0.05			
Dibutyltin compounds (DBT)	1.0			
Diphenyltin compounds (DPhT)	2.0			
Dioctyltin compounds (DOT)	1.0			
Trimethyltin compounds (TMT)	0.05			
Tripropyltin compounds (TPT)	0.05			
Tributyltin compounds (TBT)	0.05			
Triphenyltin compounds (TPhT)	0.05			

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Trioctyltin compounds (TOT)	0.05			
Tetrabutyltin compounds (TTBT)	0.5			
Tetraoctyltin compounds (TTOT)	0.5			
Tricyclohexyltin compounds (TCyHT)	0.5			
Monophenyltin compounds (MPhT)	1			
Dipropyltin coumpounds (DPT)	1			
Tetraethyltin compounds (TeET)	1			
UV stabilizer	Usage ban			
UV-320 (cas 3846-71-7) 2-benzotriazol-2-yl-4,6-di-tert-butylphenol	1000			Solvent extraction Hexane/Dichloroethane // GCMS
UV-327 (cas 3864-99-1) 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol	1000			
UV-328 (cas 25973-55-1) 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)phenol	1000			
UV-350 (cas 36437-37-3) 2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(secbutyl) phenol	1000			
Extractable heavy metals				
Antimony (Sb) (CAS 7440-36-0)	5	10	10	EN 16711-2 (textile) EN 17072-1 (leather)
Arsenic (As) (CAS 7440-38-2)	0.2			
Cadmium (Cd) (CAS 7440-43-9)	0.1			

SUBSTANCE GROUP	Limit [mg/kg]			Recommended SaMPLE PREPARATION / Test Method
	A	B	C	
Barium (Ba) (CAS 7440-39-3)	1000			
Chromium (Cr) (CAS 7440-47-3)	1			
Chromium (VI) (CAS 18540-29-9)	For textile 1.0 For leather Usage Ban 3.0			EN 16711-2 (textile) For leather : ISO 17075 with aging method ISO 10195:2018 A2 (24h/80°C/5% RH)
Cobalt (Co) (CAS 7440-48-4)	1			EN 16711-2 (textile) EN 17072-1 (leather)
Copper (Cu) (CAS 7440-50-8)	25			
Lead (Pb) (CAS 7439-92-1)	0.2			
Mercury (Hg) (CAS 7439-97-6)	0.02			
Nickel (Ni) (CAS 7440-02-0)	1			
Heavy metals				
Total Cadmium (Cd)	40			EN 16711-1 (DL 5)
Total Lead (Pb)	90 surface 90 substrate			EN 16711-1 CPSC CH-E 1002-08.1 non metallic CPSC-CH-E1001-08.1 matals CPSC-CH-E1003-09.1 surface (DL 10)
Cr (VI)	For leather 3			ISO 17075 with aging method ISO 10195:2018 A2 (24h/80°C/5% RH) (DL 3)
Nickel release	<0.5 µg/cm^2/week			EN 12472:2005-A1:2009 + EN 1811:2001+A1:2015 (DL 0.1)

5. CHEMICALS USAGE IN MANUFACTURING PROCESSES

The Oberalp Group acknowledges and underlines that the presence of hazardous chemicals can be most appropriately managed by controlling, not only which chemicals are restricted in the products (typically managed through an RSL), but even more by regulating which chemicals are allowed to enter the production process in the first place (typically managed by sourcing “safe” chemical mixtures or by using an MRSL). It is a highly important task to control the chemistry used during all stages of the production of materials as well as in manufacturing.

All suppliers and sub-suppliers which are involved in the production process of the Oberalp Group products are encouraged to source chemicals that follow the most stringent standards of chemicals use. The preferred solution for the Oberalp Group’s suppliers is to source chemical products directly either through the bluesign® bluefinder and bluesign® blueguide, or through the ZDHC Chemical Gateway. Both systems lists chemical products which have been already controlled and thus are free of certain harmful substances from the beginning.

A second solution to regulate the use of chemicals in the manufacturing process for Oberalp Group is through the use of the ZDHC Manufacturing Restricted Substances List (MRSL). An MRSL is a list of chemical substances which must be banned from intentional use in manufacturing facilities that process textile materials and trim parts in apparel and footwear. The MRSL establishes acceptable concentration limits for substances in chemical formulations used within manufacturing facilities. The limits are designed to eliminate the possibility of intentional use of the listed substances. Using an MRSL requires more attention by each supplier to ensure the compliance, as opposed to sourcing already approved chemical products as described in the former paragraph.

The ZDHC Chemical Gateway is free of access and can be found here: http://www.roadmaptozero.com/gateway/. For bluesign® bluefinder and bluesign® blueguide you can contact bluesign® directly for further information: www.bluesign.com. You can download the latest ZDHC MRSL version for free here: http://www.roadmaptozero.com/programme/manufacturing-restricted-substances-list-mrsl-conformity-guidance/. Please note that both the lists and systems of bluesign® and ZDHC are living documents and the supplier is required to make sure that the latest version is used.

Oberalp Group further expects its business partners to ensure the reduction or elimination of contaminants present in the wastewater and sludge discharge. For this purpose Oberalp Group encourages the suppliers to test wastewater and sludge discharge according to ZDHC Wastewater Guidelines.

6. VERIFYING COMPLIANCE: PRODUCT AND MATERIAL CERTIFICATION AND TESTING

6.1. General Introduction

Verifying compliance with the Oberalp RSL is a fundamental part of the procedure and the Oberalp Chemical Policy, in order to avoid the use of hazardous substances in Oberalp's products.

The Oberalp Group verifies compliance with its RSL by material and product testing on salesman samples and bulk production materials and articles, yet we also strongly encourage business partners to be proactive by keeping us informed about innovations and improvement in their products, on existing certifications and material test reports.

Whenever the Oberalp Group decides that testing a certain material or even finished product is necessary, the supplier (material and/or assembling supplier) will be requested to and shall send samples of the concerned materials, fibers, base colors or the final products for testing purposes. The Oberalp Group will give clear instructions on the laboratory or Oberalp office where the supplier shall send the materials concerned.

Supplier's test reports, verifying the product compliance with the Oberalp RSL, must be kept on file by the supplier or factory for at least 5 years.

Suppliers should also store a reference sample for one year and keep a record of the material that they sent to destination requested by Oberalp (laboratory or Oberalp Office) coming from the same batch of production. This reference sample can be used in case more material is needed for testing, to assist in interpreting test results, or in case of customer claims.

6.2. Certifications and Existing Test Reports

The Oberalp Group expects its business partners to share the goal to avoid, control and monitor hazardous substances, and therefore suppliers shall be organized to do so. Each supplier shall be proactive in the environmental and chemical improvement and compliance of its products and perform verification tests. He shall collect any certifications, material reports, MSDS and existing test reports in order to provide to the Oberalp Group proactively and also upon request.

Chemical test reports shall include at least the following information:

- Name and address of testing institute
- Report number and date
- Supplier and contact person, as well as country of supplier
- Name and code of the tested material,
- Name and code of the tested material color
- Material composition
- Hazardous substances the material has been tested for
- Test method used and Limit of Quantification (LOQ)
- Corresponding test results
- Accreditation

To be accepted by the Oberalp Group, tests need to be performed by a testing institute which has been accredited and certified in accordance with DIN/ISO/IEC 17025 – an international laboratory requirement standard to verify the laboratory competence of testing and calibration.

Oberalp allows testing of mixed samples of materials. Only components of similar material types are allowed to composite. Typical material types include textile, leather, coating, plastic, wood, paper, ceramic / glass.

For a composite sample, a maximum of 3 colors in one testing is allowed. Multi-color printing should be tested as one composite sample and not mixed with other samples.

A composite testing result above the tolerance limit is considered a “fail” or “preliminary fail” and separate tests will be conducted immediately.

If the material is certified by bluesign® and respects BSSL (bluesign® system substances list: the document created by bluesign® which specifies the limits for chemical substances in articles), Oberalp considers the material compliant with the Oberalp RSL.

6.3. RSL Compliance Failures

If Oberalp Group receives any material or component of a product that does not meet Oberalp RSL requirements, the Oberalp Group will contact the supplier to start an open dialogue on how to remediate the problem.

The supplier must carry out a proper investigation through a root cause analysis to specifically determine the source of failure. Until there is a pass test report for each material proving its compliance to the Oberalp RSL requirements, it shall not be used in any manufacturing of Oberalp Group products.

The Oberalp Group may request a third-party audit at the production site to confirm that the non-conformity has been successfully remediated.

If Oberalp Group receives products that do not meet the RSL requirements then the supplier is expected to meet certain costs incurred in recall, litigation, rework, remanufacture and/or compensation.

7. LIST OF TESTING INSTITUTES AND CONTACT

Oberalp Group main contact: Patrizia De Paoli (Patrizia.depaoli@oberalp.com)
Testing Institutes recommended:
UL (ITALY.InfoCRS@ul.com)
Intertek (elena.ruffino@intertek.com ; giuseppe.ruvolo@intertek.com)
Bureau Veritas (KAM Dascia Cellai dascia.cellai@certest.bureauveritas.com)

8. OBERALP CHEMICAL POLICY - DECLARATION OF CONFORMITY

All business partners of the Oberalp Group shall comply with the requirements of the Oberalp Chemical Policy. By signing the attached “Oberalp Chemical Policy - Declaration of Conformity”, the business partner acknowledges the receipt of the Oberalp Chemical Policy and confirms their compliance with it in order to control and monitor hazardous substances throughout the manufacturing processes. The business partner acknowledges their responsibility to ensure the compliance with the Oberalp Chemical Policy at any step of the manufacturing of the Oberalp Group’s products and to pass on the documents to any business partners involved in the production process. This includes any nominated and non-nominated (local) material suppliers, as well as assembling suppliers and subcontracted factories.

With the signature the mentioned parties certify that the products delivered to the Oberalp Group, including any steps or parts done by manufacturers/assemblers/subcontractors making materials or products for the Oberalp Group through the signatory party, will be free of all banned hazardous substances or within the threshold limits for limited substances as defined in the Oberalp RSL.

ANNEX I – COMPLETE SUBSTANCES LIST

Annex I contains the complete list of all single substances included in the substance groups, listed in the RSL under point 3.2 in the Chemical Policy.

Alkylphenols (APs)	**CAS – No.**
4-Nonylphenol	104-40-5
4-Nonylphenol branched	84852-15-3
4-Octylphenol	1806-26-4
4-tert-Octylphenol	140-66-9
Nonylphenols NP	25154-52-3
Octylphenols OP	27193-28-8
Isononylphenol	11066-49-2
Heptylphenol, branched and linear	-
Pentylphenol, branched and linear	-
p-(1,1-Dimethylpropyl)phenol	80-46-6
Alkylphenolethoxylates (APEOs)	**CAS – No.**
Nonylphenolethoxylates NPEO	9016-45-9
Octylphenolethoxylates OPEO	9002-93-1
Polyoxyethylated p-nonyl phenol	26027-38-3
Isononylphenol, ethoxylated	37205-87-1
nonylphenol, branched, ethoxylated	68412-54-4
4-nonylphenol, branched, ethoxylated	127087-87-0
octylphenol, ethoxylated	9036-19-5
octyl phenol ethoxylate, branched 9,5EO	68987-90-6
Nonylphenol, branched, ethoxylated, phosphated	37205-87-1
Amines	**CAS – No.**
2-Aminoethanol	141-43-5
Aminoethylethanolamine (AEEA)	111-41-1
Diethanolamine	111-42-2
Diethylenetriamine	111-40-0
Diphenylamine	122-39-4
Ethylenediamine	107-15-3
Hexamethylenetetramine	100-97-0

p-Phenylenediamine	106-50-3
p-Phenylenediamine	121-44-8
1,4-Benzenediamine, N1-(1-methylethyl)-N4-phenyl-	101-72-4
Asbestos	**CAS – No.**
Actinolite	77536-66-4
Amosite	12172-73-5
Anthophyllite	77536-67-5
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Tremolite	77536-68-6

Biocide	**CAS – No.**
1,2-Benzoisothiazol-3(2H)-one (BIT)	2634-33-5
2-Chloroacetamide	79-07-2
2-Methyl-4-isothiazolin-3-one (MIT)	2682-20-4
2-n-Octyl-4-isothiazolin-3-one (OIT)	26530-20-1
5-Chloro-2-methyl-4-isothiazolin-3-one (CIT)	26172-55-4
Chlorinated and non-chlorinated Isothiazolinone-derivatives	Several
Dichlorooctylisothiazolinone	64359-81-5
Dichlorophen	97-23-4
Mixture (3:1) of CIT and MIT	55965-84-9
N-Methylol-chloroacetamide	2832-19-1
Permethrin	52645-53-1
Triclosan (5-Chloro-2-(2,4-dichlorophenoxy)phenol)	3380-34-5
1,2-Benzoisothiazol-3(2H)-one (BIT)	2634-33-5
4-Chloro-3-methylphenol (CMK/CMC)	59-50-7
2-(Thiocyanatomethylthio)benzothiazol (TCMTB)	21564-17-0
Arylamine - Azo Dyes	**CAS – No.**
2,4,5-Trimethylaniline	137-17-7
2,4-Diaminoanisole	615-05-4
2,4-Diaminotoluene	95-80-7
2-Amino-4-nitrotoluene	99-55-8

2-Anisidine	90-04-0
2-Naphthylamine	91-59-8
2-Toluidine	95-53-4
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethyl-4,4'-diaminodiphenylmethane; 4,4′-Methylendi-o-toluidin	838-88-0
3,3'-Dimethylbenzidine	119-93-7
4,4’-Oxydianiline	101-80-4
4,4’-Thiodianiline	139-65-1
4,4'-Diaminodiphenylmethane	101-77-9
4,4'-Methylenebis(2-chlor)	101-14-4
4-Aminobiphenyl	92-67-1
4-Chlor-2-toluidine	95-69-2
p-Chloroaniline	106-47-8
Benzidine	92-87-5
o-Aminoazotoluene	97-56-3
p-Aminoazobenzene	60-09-3
p-Cresidine	120-71-8
2,4-Xylidine	95-68-1
2,6-Xylidine	87-62-7
6-Amino-2-ethoxynaphthalene	293733-21-8
4-Amino-3-fluorophenol	399-95-1
4-Dimethylaminoazobenzene	60-11-7
m-Toluidine	108-44-1
p-Toluidine	106-49-0
2-Naphthylammoniumacetate	553-00-4
Azoic Diazo Component 11	3165-93-3
4-methoxy-m-phenylene diammonium sulphate	39156-41-7
2,4,5-trimethylaniline hydrochloride	21436-97-5
Azoic Diazo Component 11	3165-93-3
2-Naphthylammoniumacetate	553-00-4
4-methoxy-m-phenylene diammonium sulphate	39156-41-7

2,4,5-trimethylaniline hydrochloride	21436-97-5
Chlorinated Benzenes and Toluenes	**CAS – No.**
1,2 Dichlorbenzene	95-50-1
1,2,3 Trichlorobenzene	87-61-6
1,2,3,4-Tetrachlorobenzene	634-66-2
1,2,3,5-Tetrachlorobenzene	634-90-2
1,2,4 Trichlorobenzene	120-82-1
1,2,4,5-Tetrachlorobenzene	95-94-3
1,2,5 Trichlorobenzene	108-70-3
1,3 Dichlorbenzene	541-73-1
1,4 Dichlorbenzene	106-46-7
2,3,6-Trichlorotoluene	2077-46-5
2,4 Dichlorotoluenes	95-73-8
2,6-Dichlorotoluene	118-69-4
2-Chlorotoluene	95-49-8
3,4 Dichlorotoluenes	95-75-0
3-Chlorotoluene	108-41-8
4-Chlorotoluene	106-43-4
a,a,a,2-Tetrachlorotoluene	2136-89-2
a,a,a,4-Tetrachlorotoluene	5216-25-1
a,a,a-Trichlorotoluene	98-07-7
Chlorotoluenes, all isomers	25168-05-2
Dichlorobenzenes, all isomers:	25321-22-6
Dichlorotoluenes, all isomers	29797-40-8
Hexachlorobenzene	118-74-1
Monochlorobenzene	108-90-7
Monochlorotoluenes	several
Pentachlorobenzene	608-93-5
Pentachlorotoluene	877-11-2
Tetrachlorobenzenes	several
Tetrachlorotoluenes	several
Trichlorobenzenes, all isomers:	12002-48-1 (several)

Trichlorotoluenes	several
2,3-dichlorotoluene	32768-54-0
2,5-dichlorotoluene	19398-61-9
2,6-dichlorotoluene	118-69-4
2,4,5-trichlorotoluene	6639-30-1
2,3,4,5-tetrachlorotoluene	76057-12-0
2,3,4,6-tetrachlorotoluene	875-40-1
2,3,5,6-tetrachlorotoluene	1006-31-1
Chlorinated phenoles	**CAS – No.**
2,3,5,6-Tetrachlorophenol TeCP	935-95-5
2,3,4,5-Tetrachlorophenol TeCP	4901-51-3
2,3,4,6-Tetrachlorophenol TeCP	58-90-2
2,3,4-Trichlorophenol	15950-66-0
2,3,5-Trichlorophenol	933-78-8
2,3,6-Trichlorophenol	933-75-5
2,4,5-Trichlorophenol	95-95-4
2,4,6-Trichlorophenol	88-06-2
3,4,5-Trichlorophenol	609-19-8
Pentachlorophenol PCP, salts, esters and compounds 2,3-Dichlorophenol	87-86-5 576-24-9
2,4-Dichlorophenol	120-83-2
2,5-Dichlorophenol	583-78-8
2,6-Dichlorophenol	87-65-0
3,4-Dichlorophenol	95-77-2
3,5-Dichlorophenol	591-35-5
2-Chlorophenol	95-57-8
3-Chlorophenol	108-43-0
4-Chlorophenol	106-48-9
2,3-Dichlorophenol	576-24-9
Monochlorophenols (MonoCPs), all isomers	25167-80-0
Dichlorophenols (DiCP), all isomers	25167-81-1
Trichlorophenols (TriCP), all isomers	25167-82-2

tetrachlorophenols (TeCP), salts and compounds	25167-83-3
Colorant with carcirogenic potential	**CAS – No.**
Acid Red 26	3761-53-3
Malachit Green	10309-95-2
Malachit Green Chloride	569-64-2
Malachit Green Oxalate	2437-29-8
Basic Red 9	569-61-9
Basic Violet 14	632-99-5
Direct Black 38	1937-37-7
Direct Blue 6	2602-46-2
Direct Red 28	573-58-0
Disperse Blue 1 *	2475-45-8
Disperse Orange 11	82-28-0
Disperse Yellow 3 *	2832-40-8
Pigment Black 25	68186-89-0
Pigment Yellow 34 *	1344-37-2
Pigment Yellow 157	68610-24-2
Pigment Red 104*	12656-85-8
Direct Brown 95	16071-86-6
Direct blue 15	2429-74-5
Acid red 114	6459-94-5
Disperse Red 151	61968-47-6
Disperse Yellow 56	54077-16-6
Disperse Yellow 7	6300-37-4
Colorant with allergenous potential	**CAS – No.**
Disperse Blue 3*	2475-46-9
Disperse Blue 7*	3179-90-6
Disperse Blue 26*	3860-63-7
Disperse Blue 35*	12222-75-2
Disperse Blue 102*	12222-97-8
Disperse Blue 106*	12223-01-7
Disperse Blue 124*	61951-51-7

Disperse Brown 1*	23355-64-8
Disperse Orange 1*	2581-69-3
Disperse Orange 3*	730-40-5
Disperse Orange 37/59/76*	13301-61-6
Disperse Red 1*	2872-52-8
Disperse Red 11*	2872-48-2
Disperse Red 17*	3179-89-3
Disperse Yellow 1*	119-15-3
Disperse Yellow 9*	6373-73-5
Disperse Yellow 39*	12236-29-2
Disperse Yellow 49*	54824-37-2
Solvent 14	842-07-9
Colorants Banned for other reasons	**CAS – No.**
Acid Orange 24	1320-07-6
Acid Violet 49	1694-09-3
Basic Blue 26	2580-56-5
Basic Violet 1*	8004-87-3
Basic Violet 3	603-48-5 / 548-62-9 / 14426-25-6
Direct Black 91	6739-62-4
Direct Blue 76	16143-79-6
Direct Blue 218	28407-37-6
Direct Yellow 1	6472-91-9
Disperse Yellow 23*	6250-23-3
Disperse Orange 149*	85136-74-9
Navy Blue / Blue Colorant	118685-33-9
Solvent Blue 4	6786-83-0
Dioxins and Furans	**CAS – No.**
Group 1:	Several
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4

Group 2:	Several
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5
Group 3:	Several
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0
Group 4:	Several
2,3,7,8-Tetrabromodibenzo-p-dioxin	50585-41-6
1,2,3,7,8-Pentabromodibenzo-p-dioxin	109333-34-8
2,3,7,8-Tetrabromodibenzofuran	67733-57-7
2,3,4,7,8-Pentabromodibenzofuran	131166-92-2
Group 5:	Several
1,2,3,4,7,8-Hexabromodibenzo-p-dioxin	110999-44-5
1,2,3,6,7,8-Hexabromodibenzo-p-dioxin	110999-45-6
1,2,3,7,8,9-Hexabromodibenzo-p-dioxin	110999-46-7
1,2,3,7,8-Pentabromodibenzofuran	107555-93-1
Flame Retardant	**CAS – No.**
1,1'-(isopropylidene)bis[3,5-dibromo-4-(2,3-dibromopropoxy)benzene]	21850-44-2
2,2-bis(bromomethyl)propane-1,3-diol	3296-90-0
Bis-(2,3-dibromopopyl)phosphate	5412-25-9
Chlorinated Paraffind, all chain length	Several
Decabromodiphenylether decaBDE	1163-19-5
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3

Hexabromocyclododecane HBCDD	25637-99-4
Hexabromodiphenyl ether (HexaBDE)	36483-60-0
Octabromodiphenylether octaBDE	32536-52-0
Paraffin wax, chlorinated	63449-39-8
Paraffin, C10-C13, chlorinated SCCP	85535-84-8
Paraffin, C14-C17, chlorinated	85535-85-9
Paraffin, C18-C28, chlorinated	85535-86-0
Pentabromodiphenylether (pentaBDE)	32534-81-9
Polybrominated biphenyls PBB	59536-65-1
Tetrabromobisphenol A TBBPA	79-94-7
Tetrabromodiphenyl ethers (TetraBDE)	40088-47-9
Tri-(2,3-dibromopropyl)-phosphate TRIS	126-72-7
Triethylenephosphoramide (TEPA)	545-55-1
Trimethyl phosphate	512-56-1
Tri-o-cresyl phosphate	78-30-8
Tris-(1,3-dichloro-2-propyl)-phosphate	13674-87-8
Trixylylphosphate	25155-23-1
Tris-(2-chloroethyl)-phosphate TCEP	115-96-8
Ossido di bis(pentabromofenile) (decabromodifeniletere; decaBDE)	1163-19-5
Nonabromodiphenyl ether (NonaBDE)	63936-56-1
Tris(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5
Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (“Dechlorane Plus”™, DP, or DPMA)	13560-89-9, 135821-74-8, 135821-03-3-
Fluorinated Greenhouse Gases	**CAS – No.**
Sulphur hexafluoride – SF6	2551-62-4
Perfluoromethane	75-73-0
Perfluoroethane	76-16-4
Perfluoropropane	76-19-7
Perfluorobutane	355-25-9
Perfluoropentane	678-26-2
Perfluorohexane	355-42-0
Perfluorocyclobutane	115-25-3
HFC-23	75-46-7
HFC-32	75-10-5

HFC-41	593-53-3
HFC-43-10mee	138495-42-8
HFC-125	354-33-6
HFC-134	359-35-3
HFC-134a	811-97-2
HFC-152a	75-37-6
HFC-143	430-66-0
HFC-143a	420-46-2
HFC-227ea	431-89-0
HFC-236cb	677-56-5
HFC-236ea	431-63-0
HFC-236fa	690-39-1
HFC-245ca	679-86-7
HFC-245fa	460-73-1
HFC-365mfc	406-58-6

Phenylmercury Compounds	CAS – No.
Phenylmercury acetate	62-38-4
Phenylmercury propionate	103-27-5
Phenylmercury 2-ethylhexanoate	13302-00-6
Phenylmercury octanoate	13864-38-5
Phenylmercury neodecanoate	26545-49-3

Fluorinated Substances	Classification	CAS – No.
Perfluorobutanoic acid (PFBA)	PFCAs family C4	375-22-4
Perfloropantanoic acid (PFPeA)	PFCAs family C5	2706-90-3
Perfluorohexanoic acid (PFHxA)	PFCAs family C6	307-24-4
Perfluoroheptanoic acid (PFHpA)	PFCAs family C7	375-85-9
Perfluorooctanoic acid (PFOA)	PFCAs family C8	335-67-1
Perfluorononanoic acid (PFNA)	PFCAs family C9	375-95-1
perflorodecanoic acid (PFDA)	PFCAs family C10	335-76-2
Perfloroundecanoic acid (PFUnA)	PFCAs family C11	2058-94-8
perfluorododecanoic acid (PFDoA)	PFCAs family C12	307-55-1
perfluorotridecanoic acid (PFTrA)	PFCAs family C13	72629-94-8
perfluorotetradecanoic acid (PFTeA)	PFCAs family C14	376-06-7
APFO 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta¬deca¬fluorooctanoic acid, ammonium salt	PFOA related substance	3825-26-1
Perfluorobutane sulfonic acid (PFBS)		375-73-5
Perluorohexane sulfonic acid / Perfluorohexane sulfonate (PFHxS)	PFSAs family C6	355-46-4 / 432-50-7
perfluoroheptane sulfonic acid (PFHpS)	PFSAs family C7	375-92-8
perfluorodecane sulfonic acid (PFDS)	PFSAs family C10	335-77-3
Perfluorooctane sulfonates PFOS	PFSAs family C8	1763-23-1 / 2795-39-3

Perfluorooctanesulfonamide (PFOSA)	PFOS related substance	754-91-6
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (1H, 1H, 2H, 2H-PFOS)	C8	27619-97-2
perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)		172155-07-6
6:2 FTOH, Perfluorohexylethanol	C6	647-42-7
8:2 FTOH, Perfluorooctylethanol	C8	678-39-7
1H, 1H, 2H, 2H-perfluorododecane -1-ol (10:2 FTOH)	C10	865-86-1
n-Methyl-Perfluoroocanesulfonamide (N-Me-FOSA)	PFOS related substance	31506-32-8
n-Ethyl-Perfluorooctanesulfonamide (N-Et-FOSA)	PFOS related substance	4151-50-2
n-Methyl-Perfluoroocanesulfonamide (N-Me-FOSE)	PFOS related substance	24448-09-7
n-Ethyl-Perfluorooctanesulfonamidoethanol (N-Et-FOSE)	PFOS related substance	1691-99-2
7H-dedecafluoroheptanoic acid (HPFHpA)		1546-95-8
2H, 2H- perfluorodecanoic acid (H2PFDA)		27854-31-5
Perfluorobutanesulfonate K-salt (PFBS-K)		29420-49-3
Perfluorohexanesulfonate Na-salt (PFHxS-Na)		82382-12-15
Perfluoroheptanesulfonate Na-salt (PFHpS-Na)		68555-66-8
Perfluorodecnesulfonate Na-salt (PFDS-Na)		2806-15-7
Perfluorodecnesulfonate K-salt (PFDS-K)		2806-16-8
Perfluorodecnesulfonate NH4-salt (PFDS-NH4)		67906-42-7
2H, 2H, 3H, 3H-Perfluoroundecanoic acid (H4PFUnA)		34598-33-9
1H, 1H, 2H, 2H-perfluorohexane -1-ol (4:2 FTOH)		2043-47-2
1H, 1H, 2H, 2H-perfluorooctylacrylate (6:2 FTA)		17527-29-6
1H, 1H, 2H, 2H-perfluorodecylacrylate (8:2 FTA)	PFOA related substance	27905-45-9
1H, 1H, 2H, 2H-perfluorododecylacrylate (10:2 FTA)		17741-60-5
Perfluoroalkysulfonamidoethanols F(CF2)nS02N®CH2CH2OH2 [n.5, R = H, -CH3, -CH2CH3]		several
Perfluoroalkylsulfonamidoethyl (meth)acrylates F(CF2)nSO2N®CH2CH2OC(O)CH®=CH2 [n.5, R=H, -CH3, -CH2CH3]		several
Perfluorobutanesulfonamide F(CF2)4SO2NH2		
Perfluorobutanesulfonamidoethanols F(CF2)4SO2®CH2CH2OH2 [R = H, -CH3, -CH2CH3]		several

Perfluorobutanesulfonamidoethyl (meth)acrylates F(CF2)4SO2N®CH2OC(O)CH® = CH2 [R = H, -CH3, -CH2CH3]		several
perfluoro-1-pctanesulfonyl fluoride (POSF)		307-35-7
8:2 Fluorotelomer methacrylate (8:2 FTMAC)	PFOA related substance	1996-88-9
8:2 Fluorotelomer phosphate monoester (8:2 monoPAP)	PFOA related substance	57678-03-2
Diammonium 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-heptadecafluoro-2- hydroxyundecyl phosphate	PFOA related substance	94200-45-0
8:2 Fluorotelomer phosphate monoester ammonium salt	PFOA related substance	93857-44-4
8:2 Fluorotelomer phosphate diester	PFOA related substance	678-41-1
8:2 Fluorotelomer stearate monoester (8:2 FTS)	PFOA related substance	-
8:2 Fluorotelomer sitrate triester	PFOA related substance	-
C8 PFSi Dichloro(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecaflurodecyl) methylsilane	PFOA related substance	3102-79-2
Chloro(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecaflurodecyl) dimethylsilane	PFOA related substance	74612-30-9
(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecaflurodecyl)(triethoxy)silane	PFOA related substance	101947-16-4
trichloro(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecaflurodecyl) silane	PFOA related substance	78560-44-8
(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-eptadecaflurodecyl)(trimethoxy)silane	PFOA related substance	83048-65-1
C8-PFPA Perfluorooctyl phosphonic acid	PFOA related substance	40143-78-0
Bis(perfluorooctyl) phosphinic acid (C8/C8-PFPIA)	PFOA related substance	40143-79-1
Bis(perfluorooctyl) phosphinic acid (C6/C8-PFPIA)	PFOA related substance	610800-34-5
Tris[4-3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluorodecyl)phenyl]phosphine	PFOA related substance	325459-92-5
bis[tris(4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)phenyl)phosphine]palladium(ii) dichloride	PFOA related substance	326475-46-1
Perfluorooctylethene (8:2 FTO)	PFOA related substance	21652-58-4
1H,1H,2H,2H-Perfluorodecyliodide (8:2 FTI)	PFOA related substance	2043-53-0
Heptadecafluoro-1-iodooctane (PFOI)	PFOA related substance	507-63-1
2-carboxyethylbis(2-hydroxyethyl)-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]propylammonium hydroxide	PFOA related substance	39186-68-0

N-[3-[bis(2-hydroxyethyl)amino]propyl]-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanamide	PFOA related substance	41358-63-8
3,4-bis[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]benzenesulphonyl chloride;3,4-Bis(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctylamino)benzenes ulfonyl chloride	PFOA related substance	24216-05-5
1-Propanaminium,N,N,Ntrimethyl-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-entadecafluoro-1-oxooctyl)amino]-,chloride	PFOA related substance	53517-98-9
N-(3-aminopropyl)-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanamide	PFOA related substance	85938-56-3
1-Propanesulfonic acid,3-[ethyl(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino] -,sodium salt	PFOA related substance	89685-61-0
heptadecafluoro-1-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl)oxy]nonene	PFOA related substance	84029-60-7
Pentadecafluorooctanoyl fluoride	PFOA related substance	335-66-0
Pentadecafluorooctanoic acid methyl ester	PFOA related substance	376-27-2
Pentadecafluorooctanoic acid ethyl ester	PFOA related substance	3108-24-5
Pentadecafluorooctanoic anhydride	PFOA related substance	33496-48-9
2-Decenoic acid,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-hexadecafluoro-	PFOA related substance	70887-84-2
Fatty acids, C7-13,perfluoro	PFOA related substance	68333-92-6
Fatty acids, C7-13,perfluoro, compds. With ethylamine	PFOA related substance	69278-80-4
Fatty acids, C6-18,perfluoro, ammonium salts	PFOA related substance	72623-77-9
Carboxylic acids, C7-13,perfluoro, ammonium salts	PFOA related substance	72968-38-8
Octanoic acid, pentadecafluoro-, mixed esters with 2,2'-[1,4-butanediylbis(oxymethylene)]bis[oxirane] and 2,2'-[1,6hexanediylbis(oxymethylene)]bis[oxirane]	PFOA related substance	90480-57-2
Fatty acids, C7-19, perfluoro	PFOA related substance	91032-01-8
Amides, C7-19, alphaomega- perfluoro-N,Nbis(hydroxyethyl)	PFOA related substance	90622-99-4
Carbamic acid, [2-(sulfothio)ethyl]-, C-(gamma-omegaperfluoro-C6-9-alkyl) esters, monosodium salts	PFOA related substance	95370-51-7
1,3-Propanediol, 2,2-bis(.gamma.-.omega.-perfluoro-C4-10-alkyl)thiomethyl derivs.,phosphates, ammonium salts	PFOA related substance	148240-85-1

1,3-Propanediol, 2,2-bis(.gamma.-.omega.-perfluoro-C6-12-alkyl)thiomethyl derivs.,phosphates, ammonium salts	PFOA related substance	148240-87-3
Pentanoic acid, 4,4-bis(.gamma.-.omega.-perfluoro-C8-20-alkyl)thio derivs.,compds. withdiethanolamine;4,4-Bis[(γ-ω-perfluoroalkyl(C=8-20))thio]pentanoic acid derivs. compds. withdiethanolamine	PFOA related substance	71608-61-2
Poly(oxy-1,2-ethanediyl),a-[2-[2,2,3,3,4,4,5,5,6,6,7,7, 8,8,8-pentadecafluoro-1-oxooctyl)amino]ethyl]-w-hydroxy	PFOA related substance	93480-00-3
2-Propenoic acid, 2-methyl-,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl ester, polymer with 2-propenoic acid	PFOA related substance	53515-73-4
Perfluoroisobutylene	PFOA related substance	382-21-8
Tetrafluoroethylene	PFOA related substance	116-14-3
Na-PFOA 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta¬deca¬fluorooctanoic acid, sodium salt	PFOA related substance	335-95-5
K-PFOA 2,2,3,3,4,4,5,5,6,6,7,7,8,8, 8-penta¬deca¬fluorooctanoicacid, potassium salt	PFOA related substance	2395-00-8
2,2,3,3,4,4,5,5,6,6,7,7,8,8, 8-penta¬deca¬fluorooctanoic acid, silver salt	PFOA related substance	335-**9**3-3
Octanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-,chromium(3+)	PFOA related substance	68141-02-6
Ethanaminium, N,N,Ntriethyl-,salt with pentadecafluorooctanoic acid (1:1)	PFOA related substance	98241-25-9
8:2 diPAP 8:2 Fluorotelomer phosphate diester	PFOA related substance	678-41-1
Glycols		**CAS – No.**
Bis(2-methoxyethyl)-ether		111-96-6
2-Butoxyethanol		111-76-2
2-Butoxyethylacetate		112-07-2
2-Ethoxyethanol		110-80-5
2-Ethoxyethyl acetate		111-15-9
Ethylene glycol dimethyl ether		110-71-4
2-Methoxyethanol		109-86-4
2-Methoxyethylacetate		110-49-6
2-(2-Methoxyethoxy)-ethanol		111-77-3
1-Methoxypropanol		107-98-2
2-Methoxypropanol		1589-47-5

2-Methoxypropylacetate	70657-70-4
Triethylene glycol dimethyl ether	112-49-2
1-Methoxypropylacetate	108-65-6
2-Methyl-2,4-pentanediol	107-41-5
2-Phenoxyethanol	122-99-6
Butyldiglycol	112-34-5
Diethylene glycol	111-46-6
Ethylene glycol	107-21-1
Halogenated Biphenyls, halogenated Terphenyls and halogenated Napthalenes	**CAS – No.**
Polybrominated biphenyls PBB	59536-65-1
Polychlorinated biphenyls PCBs	59536-65-1 and 36355-01-8 1336-36-3
Polychlorinated terphenyls (PCTs)	61788-33-8
Polybrominated terphenyls (PBTs)	Several
Polychlorinated naphthalenes (PCNs)	Several
Monochloronaphthalene	25586-43-0
Trichloronaphthalene	28699-88-9
tetrachloronaphthalene	1321-65-9
Pentachloronaphthalene	1335-88-2
Pentachloronaphthalene	1321-64-8
Hexachloronaphthalene	1335-87-1
Heptachloonaphthalene	32241-08-0
Octachloronaphthalene	2234-13-1
Polybrominated naphthalenes (PBNs)	Several
Polybrominated biphenyls (PBBs)	Several

Halogenated Diarylalkanes	**CAS – No.**
Monomethyl-dibromo-diphenyl methane	99688-47-8
Monomethyl-dichloro-diphenyl methane	81161-70-8
Monomethyl-tetrachloro-diphenyl methane	76253-60-6
Isocyanates	**CAS – No.**
4,4'-methylenedicyclohexyl diisocyanate	5124-30-1
Diphenylmethan-2,2-di-isocyanate (2,2-MDI)	2536-05-2
Diphenylmethan-2,4-di-isocyanate (2,4-MDI)	5873-54-1

Halogenated Diarylalkanes	CAS – No.
Diphenylmethane diisocyanate MDI	101-68-8
Hexamethylene diisocyanate HMDI	822-06-0
Isophorone diisocyanate IPDI	4098-71-9
MDI mixed isomers	26447-40-5
Technical Grade MDI	9016-87-9
Tetramethylxylene diisocyanate TMXDI	2778-42-9
Toluene diisocyanate 2,4-TDI	584-84-9
Toluene diisocyanate 2,6-TDI	91-08-7
m-tolylidene diisocyanate / 2,4/2,6-TDI mixture	26471-62-5
Phenylisocyanate	103-71-9
2,6-diisopropylphenyl isocyanate	28178-42-9
1,5-naphthylene diisocyanate	3173-72-6
2,2'-methylenediphenyl diisocyanate	253-05-2
Nitrosamine	**CAS – No.**
N-Nitroso-di-ethanolamine	1116-54-7
N-Nitroso-di-ethylamine	55-18-5
N-Nitroso-di-isopropylamine	601-77-4
N-Nitroso-di-methylamine	62-75-9
N-Nitroso-di-n-butylamine	924-16-3
N-Nitroso-di-n-propylamine	621-64-7
N-Nitroso-ethylphenylamine	612-64-6
N-Nitroso-methylethylamine	10595-95-6
N-Nitroso-methylphenylamine	614-00-6
N-Nitroso-morpholine	59-89-2
N-Nitroso-piperidine	100-75-4
N-Nitroso-di-benzylamine	5336-53-8
N-Nitroso-di-isobutylamine	997-95-5
N-Nitroso-di-isononylamine	1207995-62-7
N-Nitroso-pyrrolidine	930-55-2
Ozone Depleting Substances	**CAS – No.**
Ozone-depleting substances (CFC's) class I	**Several**
Trichlorofluoromethane CFC-11	75-69-4
Dichlorofluoromethane CFC-12	75-71-8

Halogenated Diarylalkanes	CAS – No.
1,1,2-Trichloro-1,2,2-trifluoroethane CFC-113	76-13-1
1,1,1-Trichloro-2,2,2-trifluoroethane CFC-113a	354-58-5
1,2-Dichloro-1,1,2,2-tetrafluoroethane CFC-114	76-14-2
1,1-Dichloro-1,2,2,2-tetrafluoroethane CFC-114a	374-07-2
Monochloropentafluoroethane CFC-115	76-15-3
Bromochlorodifluoromethane Halon-1211	353-59-3
Bromotrifluoromethane Halon-1301	75-63-8
Dibromotetrafluoroethane Halon-2402	124-73-2
Chlorotrifluoromethane CFC-13	75-72-9
Pentachlorofluoroethane CFC-111	354-56-3
1,1,2,2-Tetrachloro-1,2-difluoroethane CFC-112	76-12-0
1,1,1,2-Tetrachlorodifluoroethane CFC-112a	76-11-9
Heptachlorofluoropropane CFC-211	422-78-6
Hexachlorodifluoropropane CFC-212	3182-26-1
Pentachlorotrifluoropropane CFC-213	2354-06-5
Tetrachlorotetrafluoropropane CFC-214	29255-31-0
1,1,3-Trichloropentafluoropropane CFC-215	76-17-5
1,2,3-Trichloropentafluoropropane CFC-215	1652-81-9
1,1,1-Trichloropentafluoropropane CFC-215	4259-43-2
1,2,2-Trichloropentafluoropropane CFC-215	1599-41-3
Dichlorohexafluoropropane CFC-216	661-97-2
Monochloroheptafluoropropane CFC-217	422-86-6
Carbon tetrachloride CCl4	56-23-5
1,1,1-Trichloroethane (Methylchloroform)	71-55-6
Methylbromide (CH3Br)	74-83-9
CHFBr2	1868-53-7
CHF2Br	1511-62-2
CH2FBr	373-52-4
C2HFBr4	353-93-5
C2HF2Br3	353-97-9
C2HF3Br2	354-04-1
C2HF4Br	354-07-4
C2H2FBr3	172912-75-3
C2H2F2Br2	75-82-1
C2H2F3Br	421-06-7
C2H3FBr2	358-97-4
C2H3F2Br	359-07-9
C2H4FBr	762-49-2
C3HFBr6	-
C3HF2Br5	-
C3HF3Br4	-
C3HF4Br3	666-48-8
C3HF5Br2	431-78-7
C3HF6Br	2252-79-1
C3H2FBr5	-
Ozone-depleting substances (CFC's) class I	**Several**
C3H2F2Br4	148875-98-3
C3H2F3Br3	431-48-1
C3H2F4Br2	460-86-6

Halogenated Diarylalkanes	CAS – No.
C3H2F5Br	460-88-8
C3H3FBr4	-
C3H3F2Br3	666-25-1
C3H3F3Br2	460-60-6
C3H3F4Br	460-67-3
C3H4FBr3	75372-14-4
C3H4F2Br2	51584-25-9
C3H4F3Br	460-32-2
C3H5FBr2	453-00-9
C3H5F2Br	461-49-4
C3H6FBr	1871-72-3
Chlorobromomethane CH2BrCl	74-97-5
Ozone-depleting substances (CFC's) class II	**Several**
Dichlorofluoromethane HCFC-21	75-43-4
Monochlorodifluoromethane HCFC-22	75-45-6
Monochlorofluoromethane HCFC-31	593-70-4
Tetrachlorofluoroethane HCFC-121	354-14-3
Trichlorodifluoroethane HCFC-122	354-21-2
Dichlorotrifluoroethane HCFC-123	306-83-2
Monochlorotetrafluoroethane HCFC-124	2837-89-0
Trichlorofluoroethane HCFC-131	359-28-4
Dichlorodifluoroethane HCFC-132	1649-08-7
Monochlorotrifluoroethane HCFC-133a	75-88-7
HCFC-141	-
Dichlorofluoroethane HCFC-141b	1717-00-6
HCFC-142	-
Monochlorodifluoroethane HCFC-142b	75-68-3
HCFC-151	-
Hexachlorofluoropropane HCFC-221	422-26-4
Pentachlorodifluoropropane HCFC-222	422-49-1
Tetrachlorotrifluoropropane HCFC-223	422-52-6
Trichlorotetrafluoropropane HCFC-224	422-54-8
HCFC-225	-
Dichloropentafluoropropane HCFC-225ca	422-56-0
Dichloropentafluoropropane HCFC-225cb	507-55-1
Monochlorohexafluoropropane HCFC-226	431-87-8
Pentachlorofluoropropane HCFC-231	421-94-3
Tetrachlorodifluoropropane HCFC-232	460-89-9
Trichlorotrifluoropropane HCFC-233	7125-84-0
Dichlorotetrafluoropropane HCFC-234	425-94-5
Monochloropentafluoropropane HCFC-235	460-92-4
Tetrachlorofluoropropane HCFC-241	666-27-3
Trichlorodifluoropropane HCFC-242	460-63-9
Dichlorotrifluoropropane HCFC-243	460-69-5
Monochlorotetrafluoropropane HCFC-244	134190-50-4
Monochlorotetrafluoropropane HCFC-251	421-41-0
Ozone-depleting substances (CFC's) class II	**Several**
Dichlorodifluoropropane HCFC-252	819-00-1
Monochlorotrifluoropropane HCFC-253	460-35-5

Halogenated Diarylalkanes	CAS – No.
Dichlorofluoropropane HCFC-261	420-97-3
Monochlorodifluoropropane HCFC-262	421-02-3
Monochlorofluoropropane HCFC-271	430-55-7

Pesticides	CAS – No.
Aldrine	309-00-2
Acetamiprid	135410-20-7
Chlordane	57-74-9
Dinotefuran	165252-70-0
Hexachlorcyclohexane, α	319-84-6
Hexachlorcyclohexane, β	319-85-7
Hexachlorcyclohexane, δ	319-86-8
Imidacloprid	105827-78-9
Endrine	72-20-8
Heptachlor epoxide	1024-57-3
Heptachlorine	76-44-8
2-2(2,4,5-Trichlorophenoxy)propionice acid, salts and compunds	93-72-1
2,4,5-Trichlorophenoxyacetic acid, salts and compounds	93-76-5
Dieldrine	60-57-1
p,p'-Dichlorodiphenyldichloroethane (p,p'-DDD)	72-54-8
p,p'-Dichlorodiphenyldichloroethylene (p,p'-DDE)	72-55-9
p,p'-Dichlorodiphenyltrichloroethane (p,p'-DDT) and its isomers; preparations containing DDT and its isomers	50-29-3
Endosulfan	115-29-7
Alachlor	15972-60-8
Aldicharb	116-06-3
Atrazine	1912-24-9
Azinphos ethyl	2642-71-9
Azinphos methyl	86-50-0
Binapacryl	485-31-4
Bromophos-ethyl	4824-78-6
Captafol	2425-06-1
Carbaryl	63-25-2

Carbendazim	10605-21-7
Chlordecone / Kepone	143-50-0
Chlordimeform	6164-98-3
Chlorfenvinphos	470-90-6
Chlorobenzilate	510-15-6
Chlorpyrifos	2921-88-2
Chlorthalonil	1897-45-6
Coumaphos	56-72-4
Cyfluthrin	68359-37-5
Cyhalothrin, λ-	91465-08-6
Cypermethrin	52315-07-8
Dinoseb and salts	88-85-7 et al
Dinoterb	1420-07-1
Disulfoton	298-04-4
Diuron	330-54-1
DNOC	534-52-1
Endosulfan, α-	959-98-8
Endosulfan, β-	33213-65-9
Esfenvalerate	66230-04-4
Ethion	563-12-2
Ethylene dibromide (EDB)	106-93-4
Ethylene oxide (Pesticide)	75-21-8
Fenchlorphos	299-84-3
Fenitrothion	122-14-5
Fenvalerate	51630-58-1
Flumehtrin	69770-45-2
Hexachlorocyclohexane (HCH), all isomers	608-73-1
Isodrine	465-73-6
Isoproturon	34123-59-6
Kelevane	4234-79-1
Nitenpyram	150824-47-8

Thiacloprid	111988-49-9
Thiamethoxam	153719-23-4
Phoxim	14816-18-3
Profenophos	41198-08-7
Propanil	709-98-8
Propetamphos	31218-83-4
Pyrazon	1698-60-8
Quinalphos	13593-03-8
Quintozene	82-68-8
Simazine	122-34-9
Strobane	8001-50-1
1,2-dibromo-3-chloropropane (DBCP)	96-12-8
2,4-Dichlorophenoxyacetic acid, its salts and compounds	94-75-7
4,6-Dichloro-7-(2,4,5-trichlorophenoxy)-2-trifluoromethylbenzimidazole (DTTB)	63405-99-2
Deltamethrin	52918-63-5
Demeton	919-86-8
Diazinon	333-41-5
Dichlofenthion	97-17-6
Dichlofluanide	1085-98-9
Dichlorprop	120-36-5
Dichlorvos	62-73-7
Diclofol	115-32-2
Dicrotophos	141-66-2
Dicyclanil	112636-86-6
Diflubenzuron	35367-38-5
Dimethoate	60-51-5
Ethyl parathion	56-38-2
Hexachlorobenzene	118-74-1
Lindane	58-89-9
Linuron	330-55-2
Malathion	121-75-5
MCPA	94-74-6

MCPB	94-81-5
Mecoprop	93-65-2
Methamidophos	10265-92-6
Methoxychlor	72-43-5
Methyl bromide	74-83-9
Methyl parathion	298-00-0
Mevinophos	7786-34-7
Mirex	2385-85-5
Monocrotophos	6923-22-4
Monolinuron	1746-81-2
o,p'-Dichlorodiphenyldichloroethane (o,p'-DDD)	53-19-0
o,p'-Dichlorodiphenyldichloroethylene (o,p'-DDE)	3424-82-6
o,p'-Dichlorodiphenyltrichloroethane (o,p'-DDT) and its isomers; preparations containing DDT and its isomers	789-02-6
Omethoate	1113-02-6
Oxydemeton-methyl	301-12-2
Paraquat dication	4685-14-7
Paraquat dichloride	1910-42-5
Pentachloroanisole	1825-21-4
Perthane	72-56-0
Phosphamidon	13171-21-6
Pirimiphos-methyl	29323-93-7
Timiperone (DTTB)	57648-21-2
Tolyfluanide	731-27-1
Toxaphene	8001-35-2
Tribufos (DEF)	78-48-8
Trichlorfon	52-68-6
Triflumuron	64628-44-0
Trifluralin	1582-09-8
Vinclozolin	50471-44-88
Telodrin	297-78-9
Clothianidin	210880-92-5

Plasticizers	CAS – No.
Bis(2-methoxyethyl)phthalate DMEP	117-82-8
Butylbenzylphthalate BBP	85-68-7
Di-(2-ethylhexyl) adipate	103-23-1
Di(2-ethylhexyl)phthalate DEHP	117-81-7
Dibutylphthalate DBP	84-74-2
Di-C6-8-branched alkyl esters DIHP	71888-89-6
Di-C7-11-branched and linear alkyl esters DHNUP	68515-42-4
Di-iso-butylphthalate DIBP	84-69-5
Di-iso-decylphthalate DIDP	26761-40-0 / 68515-49-1
Di-iso-nonylphthalate DINP	28553-12-0 /68515-48-0
Dimethylphthalate DMP	131-11-3
Di-n-hexylphthalate DNHP	84-75-3
Di-n-octylphthalate DNOP	117-84-0
Di-pentylphthalate (n-, iso-, or mixed) DPP	131-18-0 / 605-50-5 / 84777-06-0
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear DHP	68515-50-4
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl estres	68515-51-5
1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diestres	68648-93-1
Diethyl phthalate (DEP)	84-66-2
Dinonyl phthalate (DNP)	84-76-4
Diisohexyl phthalate	71850-09-4
Diisopctyl phthalate (DIOP)	27554-26-3
Di-n-propyl phthalate (DPRP)	131-16-8
Di-cyclohexyl phthalate (DCHP)	84-61-7
N-pentyl-isopentylphthalate NPIPP	776297-69-9
Disodium Phthalate	15968-01-1
m-Phthalic Acid	121-91-5
o-Phthalic Acid	88-99-3
Phthalic anhydride	85-44-9
p-Phthalic Acid	100-21-0
Sodium Phthalate	10197-71-4

Polyaromatic Hydrocarbons (PAHs)	CAS – No.
Acenaphtene	83-32-9

Acenaphtylene	208-96-8
Anthracene	120-12-7
Benzo (a) anthracene **	56-55-3
Benzo (a) pyrene **	50-32-8
Benzo (b) fluoranthene **	205-99-2
Benzo (e) pyrene **	192-97-2
Benzo (g,h,i) perylene **	191-24-2
Benzo (j) fluoranthene **	205-82-3
Benzo (k) fluoranthene **	207-08-9
Chrysene **	218-01-9
Dibenzo (a,h) anthracene **	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno (1,2,3-cd) pyrene **	193-39-5
Naphtalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0
1-Methylpyrene	2381-21-7
Cyclopenta [c,d]pyrene	27208-37-3
Dibenzo[a,e]pyrene	192-65-4
Dibenzo[a,h]pyrene	189-64-0
Dibenzo[a,i]pyrene	189-55-9
Dibenzo[a,l]pyrene	191-30-0
Solvents	**CAS – No.**
1,1,1-Trichloroethane	71-55-6
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,2,3-Trichloropropane	96-18-4
1,2-Dichloroethane	107-06-2
Acetone	67-64-1
Benzene	71-43-2

Benzine	8032-32-4
Benzine/Gasoline	Several
Carbon Disulfide	75-15-0
Chlorinated ethanes, all isomers	Several
Cyclohexane	110-82-7
Dichloromethane	75-09-2
Dimethyl sulfoxide (DMSO)	67-68-5
Gasoline	8006-61-9
Hexachloroethane	67-72-1
N,N-Dimethylacetamide (DMAc)	127-19-5
n-Hexane	110-54-3
N-Methylpyrrolidone (NMP)	872-50-4
Pentachloroethane	76-01-7
Pentane	109-66-0
Tetrachloroethylene (Perchloroethylene)	127-18-4
Tetrahydrofuran	109-99-9
Trichloroethylene	79-01-6
Trichloromethane (Chloroform)	67-66-3
Hexachlorobutadiene	87-68-3
1,1,1,2-Tetrachloroethane	630-20-6
N.ethyl-2-pyrrolidone (NEP)	2687-91-4
N,N-dimethylformamide (DMFa)	68-12-2
Toluene	108-88-3
Trimethylbenzenes, all isomers	25551-13-7
1,2,3-Trimethylbenzene	526-73-8
1,2,4-Trimethylbenzene	95-63-6
1,3,5 Trimethylbenzene	108-67-8
Xylene, all isomers	1330-20-7
Xylene-m	108-38-3
Xylene-o	95-47-6
Xylene-p	106-42-3
Terpene hydrocarbons L-Limonene	5989-54-8

Terpene hydrocarbons D-Limonene	5989-27-5
Turpentine, oil	8006-64-2
Tin-organic compounds	**CAS – No.**
Dibutyltin DBT	14488-53-0
Dioctyltin DOT	15231-44-4
Di-u-oxo-di-n-butylstanniohydroxyborane/Dibutylin hydrogen borate C8H19BO3Sn (DBB)	75113-37-0
Monobutyltin MBT	78763-54-9
Monooctyltin MOT	several
Tetrabutyltin TeBT	1461-25-2
Tetraoctyltin TeOT	3590-84-9
Tributyltin TBT	36643-28-4 / 56573-85-4
Tricyclohexyltin TricycloHT	several
Triphenyltin TPhT	668-34-8
Monomethyltin coumpounds (MMT)	several
Dimethyltin compounds (DMT)	several
diphenyltin compounds (DPhT)	several
Trimethyltin compounds (TMT)	several
Tripropyltin compounds (TPT)	several
Trioctyltin compounds (TOT)	several
Monophenyltin (MPhT)	several
Dipropyltin coumpounds (DPT)	Several
Tetraethyltin (TeET)	several
Others	**CAS – No.**
o-Phenylphenol OPP	90-43-7
2,4-Dinitrotoluene	121-14-2
Quinoline	91-22-5

ANNEX II – RISK MATRIX

The risk matrix shown in Annex II highlights the restricted substance risks associated with different materials. It is based on AFIRM's many years of experience in manufacturing and in managing restricted substances across a wide range of materials.

The aim of the risk matrix is to provide information on those substances that have historically been deliberately used or found as reagent/contaminants in different materials. The matrix does not represent a recommendation for testing, as individual supplier need to conduct detailed risk assessments on their own products and components.

Priority Legend (evaluation of substances' risk in terms of use/presence of the substances in products)**:**

1	Indicates that a chemical has been in widespread use and/or frequently detected
2	Indicates that a chemical has been deliberately used and/or detected in a particular material occasionally.
3	Indicates there is a very low but theoretical chance that a chemical could be used and/or detected occasionally.
	Indicates that we believe there is an almost negligible risk of a chemical being used and/or detected

Formaldehyde	1	Disinfectant, preservative; fumigant, stabilizer, a starch modifier, a reagent in analysis, drying agent. Used in textiles as an anti-creasing and anti-shrinking agent. It is also often used in polymeric resins.
Alkylphenols (APs) & Alkylphenolsethoxylates (APEOs)	1	Can be used as or found in detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifying/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding and down/feather fillings.
Arylamides (Azo Dyes)	1	Azo Dyes and pigments are colorants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those which degrade to form the listed cleavable amines are restricted. Used for dyeing textile.
pH value	3	Skin contact textiles and garments
DMFU	3	Only main materials (>10% of total weight), linings (lining, sleeve and pocket lining)
Chlorinated Benzene and Toluene	2	Can be used as carriers in the dyeing process of polyester fibers. They can also be used as solvents
Chlorinated Phenols	3	Can be used as preservatives or pesticides. They are sometimes used to prevent mold and kill insects when growing cotton and when storing/transporting fabrics. Can also be used as preservatives in print pastes.

Colorants with Carcinogenic Potential	2	Used for dyeing textile and fiber
Colorants with Allergenic Potential	2	
Flame retardants	3	They are rarely used to meet flammability requirements in children's clothing and adult products. They should no longer be used.
PFCs	1	They are present in water, oil and stain repellent agents
Nitrosamines		Can be formed as by-product in the production of rubber
Pesticides	3	May be found in natural fibers
Plasticizers	1	Commonly added to plastics to increase flexibility and workability. They are used to facilitate the molding of plastics by decreasing its melting temperature. They can be found in: flexible plastic components, print pastes, adhesives, plastic buttons, plastic sleevings, polymeric coatings.
PAHs	1	They are natural components of crude oil and are common residues from oil refining. Oil residues containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastic, lacquers and coating. They also may be formed from thermal decomposition of recycled materials during reprocessing.
Organotin Compounds	3	Are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides, catalysts in plastics and glue production, and heat stabilizers in plastic/rubber. In textile and apparel they are associated with plastic/rubber, inks, paints, metallic glitter, polyurethane products and heat transfer material.
Heavy Metals	3	*Sb*: catalyst in polymerization of polyester, flame retardants, fixing agents, pigments and alloy. *As*: preservatives, pesticides and defoliants. *Ba*: pigments for inks, plastics, coatings, dyeing, mordants, filler in plastic, textile finishing and leather tanning. *Cd*: pigments (especially red, orange, yellow and green); stabilizer for PVC; fertilizer, biocides and paints. *Cr*: dyeing additive, dye-fixing agent, color fastness after-treatment, dyes of wool, silk and polyamide and leather tanning *Co:* alloys, pigments, dyestuff and plastic buttons. *Cu:* alloys and pigments and antimicrobial agent *Pb:* plastics, paints, inks, pigments and surface coatings *Hg:* pesticides and paints *Ni:* plating alloys and improving corrosion-resistance and harness of alloys. *Se:* synthetic fibers, paints, inks, plastics and metal trims
Nickel release	1	Metallic components with direct and prolonged skin contact
Cr (VI)	1	Leather
SCCPs	2	Used as flame retardants or as fat liquoring agents in leather production. They can be also used as plasticizers.

Bisphenol A	3	Used in the production of epoxy resin, polycarbonate plastics, flame retardants and PVC.
DMFa	2	It is a solvent used in plastics, rubbers, PU coating.

ANNEX III - TEST MATRIX

To provide a clear guidance for suppliers on the tests required or recommended for each type of material, and to make testing prioritization more efficient, the Oberalp Group developed a matrix that cross-references relevant substances to each material type.

The test matrix is not intended to replace regulatory requirements, but to provide additional guidance to our suppliers to help prioritize what chemicals to test on which type of material. Tests methods are listed in the RSL; if the suppliers decide to use an equivalent method, they shall inform Oberalp Group before.

- Testing strongly recommended
- ○ Testing recommended

Test Item	Textiles from natural fibres	Textiles from synthetic fibres	Additional testing for coated or printed textiles	Leather	Plastics and other synthetic materials (PU, PVC, Rubber, TPU, TPR, EVA, etc.)	Metal parts
pH Value	□	□		□		
Arylamines (Azo Dyes)	□	□		□		
Colorants with carcinogenic potential	□	□		□		
Colorants with allergenous potential	□	□		□		
Colorants banned for other reasons	□	□		□		
Formaldehyde	□	□		□		
Extractable Heavy Metals	○	□	□	□	□	□
Chromium VI				□		
Total Lead			□	□	□	□
Total Cadmium			□	□	□	□
Nickel release (*direct and prolonged skin contact)*						□
Alkylphenols and Alkylphenolethoxylates	□	□	○	□	○	
Chlorinated Phenols	□	□		□		
Tin Organic Compounds	○	○	□	□	□	
Plasticizers			□		□	
Polyaromatic Hydrocarbons (PAHs) incl. Benzo(a)pyrene		□	□		□	
PFCs *(required if sample was treated with stain/water repellent finishing)*	□	□	□	□	□	
Dimethylfumarate *(Material with direct skin contact; required if the product is packaged with any form of anti-mold agent)*	○	○		□	○	
Flame Retardants	○	○			○	
Isocyanates *(Required for PU and for*			□□ PU		□□ PU	

relevant functional finishes)						
Chlorinated Benzened and Toluenes	○	□		○		
Bisphenol A					□	
Halogenated Biphenyls, Terphenyls and Naphthalenes	○	○		○	○	
Nitrosamine					○ (rubber)	
Halogenated Diarylalkanes	○	○			○	
Acrylamide	○	○			○	
2-Phenyl-2-propanol					□□□○ (EVA)	
Polyvinylchloride (PVC)					□	
Solvents	□	□		○	○	
Pesticides	○			○		
DMFa (Dimethylformamide)		○	○			
SCCP	○	○	○	□	□	