

Oberalp Group Chemical Policy

SALEWA, DYNAFIT, WILD COUNTRY, POMOCA, EVOLV, LAMUNT



Version VII, FEBRUARY 2024

TABLE OF CONTENTS

1. INTRODUCTION	3
1.1. PURPOSE	3
1.2. INVOLVED PARTIES AND RESPONSIBILITIES / LIABILITIES	3
2. BASIS AND SCOPE OF THE OBERALP CHEMICAL POLICY	4
2.1. BASIS.....	4
2.2. SCOPE	4
2.3. STRUCTURE OF THE RSL.....	4
3. PRODUCT RSL.....	6
4. PACKAGING RSL	10
5. DOWN AND FEATHERS FILLING REQUIREMENTS.....	10
5. BEST PRACTICE CHEMICAL MANAGEMENT	11
6. PREFERRED CHEMICALS.....	11
7. RSL COMPLIANCE FAILURES	11
8. OBERALP CHEMICAL POLICY - DECLARATION OF CONFORMITY	11
10. OBERALP GROUP CONTACT	12
ANNEX I – COMPLETE SUBSTANCES LIST	13
ANNEX 2 TESTING ACTIVITY	21
ANNEX 3 TESTING MATRIX – DETAILS.....	23

1. INTRODUCTION

1.1. PURPOSE

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 has been revised every two years since then. The RSL was then used to test and verify compliance of our products, with involvement of suppliers when necessary. With the fifth version Oberalp began to engage all its suppliers in actively enforcing its chemical requirements. This sixth version continues with the new method.

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.

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

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 prototypes, salesmen’s samples, pre-production samples, and all bulk production orders.

Oberalp requires that its business partners respect all applicable 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 products and the environment . Oberalp business partners shall further ensure compliance with these requirements along their 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, as well as a precautionary approach on environmental management. All suppliers are expected to contribute to the Oberalp Group’s efforts in monitoring and improving labor standards in their factories, including, where 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.
- Non-nominated material suppliers and/or suppliers of materials sourced locally through the assemblers.
- Assembling suppliers and connected factories.
- Subcontracted factories
- The management and staff of 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 all 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 nominated and non-nominated material suppliers, as well as assembling suppliers and their subcontractors, must acknowledge receipt of the Oberalp Chemical Policy in written form, and confirm that they will 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. BASIS AND SCOPE OF THE OBERALP CHEMICAL POLICY

2.1. BASIS

The main instrument for the application of the Oberalp Chemical Policy is the Oberalp RSL. It is based on EU (REACH Reg. 1907/2006) and extra-EU legal regulations such as the US Consumer Product Safety Act on the import and distribution of articles, and goes beyond these requirements for certain substances.

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.

REACH foresees three main control instruments, each with different goals:

- i. **Registration** – to collect 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** – to restrict the marketing, use and placing on the market of certain hazardous chemicals as substances, mixtures or parts of an article.
- iii. **Authorization** – 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.

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 at least every two years.

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 necessarily 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

2.2. SCOPE

The scope of application of the Chemical policy is divided into three parts:

- **Product RSL:** all chemical requirements related to the materials used in the products and collections of the Oberalp Brands (e.g. footwear, apparel, backpacks)
- **Packaging:** comprises all products used for the containment, protection, handling, delivery and presentation of goods. These chemical requirements are applicable to all the packaging used for Oberalp items (B2B included): materials, mock-ups, prototypes, salesmen’s samples, pre-production samples, and all bulk production orders.
- **Down and feather:** it contains the requirements applicable on all the down and feather filling.

2.3. STRUCTURE OF THE RSL

The Oberalp Product Restricted Substances List (RSL) scheme is divided in the following way:

NOTE: specific remarks related to the different materials

MATERIAL INVOLVED: This column marks materials at risk, following a production process risk assessment.

Material definitions:

Textile: cloth or other material produced by weaving or knitting fibres.

Synthetic materials composed of fabric plus coating are categorized under “coated textile”.

Leather: all materials that are produced starting from animal skin. Fake leather is categorized as “coated textile”.

Metal part: material that is made by single or different types of metals.

Plastic: all polymeric materials. All the coatings applied on fabric or leather fall under “coated textile” or “coated leather”.

CHEMICAL NAME: single substance or substances group that must be restricted in the product due to their toxicity or environmental impact.

CAS: the unique numerical identifier assigned by the Chemical Abstracts Service (CAS) to every chemical substance. While there may be various synonyms and different naming conventions for a chemical, there is only one CAS number.

In case of **Group of substances**, you’ll find the indication “various”: the detailed substances lists that refer to the groups are written in the annex 1.

LIMIT: it is written in mg/kg (ppm) for three usage ranges: A, B, C

A: Next to skin and baby use (0 to 3 years)

B: Occasional skin contact

C: No skin contact

Alignment with bluesign® parameters: all the requirements aligned with the bluesign® RSL are highlighted in light blue

3. PRODUCT RSL

MATERIAL INVOLVED	CHEMICAL NAME	CAS	LIMIT (MG/KG)			TEST METHOD	NOTE
			A	B	C		
Textile Leather	Alkylphenols (APs) and Alkylphenoethoxylates (APEOs)	SEE ANNEX 1	Alkylphenol: 10 Alkylphenoethoxylate: 100			Textile ISO 18254-1/ AP ISO 21084 Leather: EN ISO 18218-1 APEO / ISO 18218-2 AP	
Textile Leather	Amines	SEE ANNEX 1	100			All materials: Extraction with MeOH // GC-	
Textile Leather	Azo Dyes & its Arylamine salts	SEE ANNEX 1	20			Textile: EN 14362 1 & 3 Leather: ISO 17234 1&2	
Textile Leather	Chlorinated Benzenes and Toluenes	SEE ANNEX 1	group 1: 1 each group 1: 5 each			Textile and leather: DIN EN 17137	
Textile Leather	Chlorinated Phenols	SEE ANNEX 1	0,5			Textile : UNI 11057 Leather ISO 17070	
COLORANTS							
Textile	Colorants with carcinogenic potential	SEE ANNEX 1	15 ppm/ 1mg/L			Textile: DIN 54231	
Textile	Colorants with allergenic potential	SEE ANNEX 1	15 ppm/ 1mg/L				
Textile	Colorants banned for other reasons	SEE ANNEX 1	15 ppm/ 1mg/L				
Textile	Flame retardants	SEE ANNEX 1	5.0			Textile : ISO 17881-1/2	
Textile Leather	Formaldehyde	50-00-0	16	75	150	Textile: ISO 14184-1 Leather: ISO 17226-1	
HEAVY METALS: EXTRACTABLE							
Textile Leather	Antimony	7440-36-0	5	10	10	Textile: EN 16711-2 Leather: EN 17072-1	
	Cadmium	7440-43-9	0.1				
	Lead	7439-92-1	0.2				

MATERIAL INVOLVED	CHEMICAL NAME	CAS	LIMIT (MG/KG)			TEST METHOD	NOTE
			A	B	C		
Textile Leather Metal part	Nickel	7440-02-0	Textile and leather: 1 Metal part: <0.28 µg/cm ² /week			Textile: EN 16711-2 Leather: EN 17072-1 Metal: coated EN 12472:+ EN 1811 Not coated EN1811	
Textile Leather	Chromium (VI)	18540-29-9	Textile 1.0 Leather 3.0			Textile: EN 16711-2 Leather : ISO 17075-2 with aging method ISO 10195:2018 A2	
	Arsenic	7440-38-2	0.2			Textile: EN 16711-2 Leather: EN 17072-1	
	Barium	7440-39-3	1000				
	Chromium	7440-47-3	1				
	Cobalt	7440-48-4	1				
	Copper	7440-50-8	25	50	50		
	Mercury	7439-97-6	0.02				
HEAVY METALS: TOTAL							
Textile Leather Plastic Metal part	Total Cadmium	7440-43-9	40			Textile EN 16711-1 Plastic: EN 1122 Leather ISO 17072-2	applicable only on coated fabric and leather
Textile Leather Plastic Metal part	Total Lead	7439-92-1	90			Non metal: CPSC CH-E 1002-08.3 Metals CPSC-CH-E1001-08.3 Surface CPSC-CH-E1003-09.1	applicable only on coated fabric and leather
MONOMERS:							
Plastic Textile	Isocyanates	SEE ANNEX 1	3.0			DIN EN 13130-8	applicable only to textile with PU coating
Plastic	Styrene	100-42-5	500			Extraction by Methanol, GC-MS	
Plastic	Vinylchloride Monomer VCM	75-01-4	1			EN ISO 6401	applicable only to PVC
Textile Leather	Pesticides	SEE ANNEX 1	0.5			Textile: EPA 8081b - EPA 8151a Leather: ISO 22517	

MATERIAL INVOLVED	CHEMICAL NAME	CAS	LIMIT (MG/KG)			TEST METHOD	NOTE
			A	B	C		
Textile Leather	PFAS (ex PFC)	SEE ANNEX 1	PFOA, PFHxS and their salts: 0,025 PFHxS related substance :1 PFOA related substances (sum): 1 PFOS Textile/coated leather: 1 µg/m² Leather without coating: 0,025 other: 1 PFCA C9-C14: 0,025 total fluorine: 50 ppm			Textile: prEN 17681 1-2 Leather: ISO 23702-1 all materials: total fluorine EN 14582 or ASTM D7359	
Plastic	Nitrosamine	SEE ANNEX 1	0.5			EN 19577	applicable only to rubber
Plastic Leather Textile	Plasticizers (phthalates)	SEE ANNEX 1	Plastic: 500 Textile and leather:100			Plastic part: CPSC-CH-C1001-09.4 Leather: ISO 16181 Textile: ISO 14389	applicable only on coated fabric and leather
Plastic Leather Textile	Polyaromatic Hydrocarbons (PAHs)	SEE ANNEX 1	Group A: 1 Group B: sum 10r			AfPS GS 2019:01 PAK	applicable only on coated fabric and leather
Plastic Leather Textile	Solvents	SEE ANNEX 1	Benzene: 5 Others: 50			CEN ISO/TS 16189	
Textile Plastic	SCCP (Paraffin, C10-C13, chlorinated)	85535-84-8	100			Combined CADS/ISO 18219:2015 method V1:06/17 (extraction ISO 18219 and analysis by GC/NCI/MS)	applicable only on coated fabric and leather
Textile Leather Plastic	Organo Tin compounds	SEE ANNEX 1	TBT 0,1 Group a: 0,5 Group b: 1 Group c: 2			Textile: ISO 22744-1 Non-Textile: ISO/TS 16179	
Textile plastic	UV stabilizer	SEE ANNEX 1	1000			ISO 24040 THF extraction and GC/MS detection	
OTHER CHEMICAL SUBSTANCES							
Textile	Bisphenol A Bisphenol A Bisphenol S	80-05-7	1.0			1 g sample/20 ml THF, sonication for 60 minutes at 60° C, analysis with LC/M	only recycled textile

MATERIAL INVOLVED	CHEMICAL NAME	CAS	LIMIT (MG/KG)			TEST METHOD	NOTE
			A	B	C		
	Bisphenol B Bisphenol AF Bisphenol F						
Textile Plastic Leather	Dimethylfumarate	624-49-7	0.1			ISO 16186	
Textile Leather	pH	-	Textiles: 4.0 - 7.5 Leather: 3.5 - 7.0			Textiles: EN ISO 3071 Leather: EN ISO 4045	
Textile	Quinoline	91-22-5	50			DIN 54231	
Leather Textile	O-Phenylphenol OPP	90-43-7	Leather	50	100	200	DIN 50009
			Textile 50				
Plastic	Acetophenone and 2 - phenyl 2-propanol	98-86-2 617-94-7	50			Extraction by Methanol, GC-MS	

4. PACKAGING RSL

MATERIAL INVOLVED	CHEMICAL NAME	CAS	LIMIT	TEST METHOD	NOTE
HEAVY METALS					
ALL PACKAGING MATERIAL	Chromium (VI)	18540-29-9	Sum of all = 100	Acid digestion	
	Mercury	7439-97-6			
	Cadmium	7440-43-9			
	Lead	7439-92-1			

5. DOWN AND FEATHERS FILLING REQUIREMENTS

PARAMETER	METHOD	LIMIT REQUIRED
pH VALUE	EN 1413	6.6 – 7.5
OXYGEN INDEX	EN 1162	≤ 4,8 mg O ₂ / 100g
OIL AND FAT CONTENT	EN 1163	0.5% - 2%
TURBIDITY	EN 1164	≥ 500 mm
MICROBIOLOGICAL STATE	EN 1884	Mesophilic aerobic bacteria count < 1.000.000 CFU/g Faecal streptococci count < 100 CFU/g Sulphite reducing clostridium count < 100 CFU/g Presence of salmonella: absent in 20 g

5. BEST PRACTICE CHEMICAL MANAGEMENT

Below some suggestions for safe chemical management.

Provide the Oberalp RSL to all suppliers

The Oberalp RSL is made using the Oberalp risk evaluation and it can be different from those received by other brands. Sharing this RSL with the suppliers can avoid misunderstanding.

Sourcing “safe” chemical products

Source chemical products through

- bluesign® bluefinder and bluesign® blueguide (www.bluesign.com)
- ZDHC Chemical Gateway. (<http://www.roadmaptozero.com/gateway/>)

Both systems list chemical products which have been already controlled and are thus free of certain harmful substances from the beginning.

Please note that both the lists and systems are living documents and the supplier should make sure that the latest version is used.

Use of MRSL (Manufacturing Restricted substance list)

An MRSL is a list of chemical substances which must be banned from intentional use in manufacturing facilities.

This document can help to control the chemicals during the production process. 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 compliance.

Oberalp Group encourages the use of ZDHC MRSL for monitoring purposes. (<https://downloads.roadmaptozero.com/input/ZDHC-MRSL-Conformance-Guidance>)

Verifying Compliance: Product And Material Testing

See the details in Annex 2 TESTING ACTIVITY.

6. PREFERRED CHEMICALS

All chemicals used, even if they are legal and RSL compliant, can have an impact on the environment. Suppliers should as much as possible request and source chemicals that are:

- Water-based (that use no harmful solvents)
- More easily biodegradable
- Lower toxicity / less harmful (to workers, environment, and end consumers)
- Lower impact upstream production (e.g. renewable resources)
- Lower impact upstream (e.g. safer method of chemical manufacture)
- Recyclable

(Chemicals in Textile Production, EOG, 2018)

7. 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 shall carry out a proper investigation through a root cause analysis to specifically determine the source of the 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 and that measures have been enacted to prevent it from reoccurring.

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

8. OBERALP CHEMICAL POLICY - DECLARATION OF CONFORMITY

All business partners of the Oberalp Group must comply with the requirements of the Oberalp Chemical Policy. By signing the attached “Oberalp Chemical Policy -

Declaration of Conformity”, the business partner acknowledges receipt of the Oberalp Chemical Policy and confirms compliance with it, by controlling and monitoring hazardous substances throughout the manufacturing processes. Each business partner acknowledges their responsibility to ensure compliance with the Oberalp Chemical Policy at each step of the manufacturing of the Oberalp Group’s products and to pass on the documents to any business partners and subcontractors or factories involved in the production process. This includes any nominated and non-nominated (local) material suppliers, as well as assembling suppliers, and outsourcing partners for any part of the production process.

With his / her signature, the supplier certifies that all 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.

*****FOR FOOD CONTACT PRODUCTS ONLY*****

The supplier must provide the below information upon request:

- Food/liquids allowed.
- Food/liquids that cannot be used.
- Using conditions
- Washing conditions

9. BIOCIDES

Oberalp products are intended for use in the mountains, in sports activities, and engineered to last. To increase the durability of items under these conditions and reduce the need for washing too often, Oberalp approves the use of chemical substances that help to prevent the development of odour-causing bacteria.

The choice and use of these biocidal substances is subject to the following conditions:

- The active substance of the biocide is approved for the specific use and it is registered in the ECHA database (see <https://echa.europa.eu/it/information-on-chemicals/biocidal-active-substances>)

- The material treated with the biocidal substance is compliant with the Oberalp Product RSL
- The supplier of the treated material informs Oberalp of the presence of the biocidal treatment and provides all the data required for the compliance of obligations regarding labeling and customer information.

10. OBERALP GROUP CONTACT

If you have any doubts or questions about this document or its application, please contact:

Sara Riato (Chemical Specialist)

sara.riato@oberalp.com

She can provide all necessary explanations and the list of the third party labs nominated by Oberalp for all testing activities.

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 2.3 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	various
Isononylphenol	11066-49-2
Heptylphenol, branched and linear	-
Pentylphenol, branched and linear	-
p-(1,1-Dimethylpropyl)phenol	80-46-6

Alkylphenoethoxylates (APEOs)	CAS – No.
Nonylphenoethoxylates NPEO	9016-45-9
Octylphenoethoxylates 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
Trimethylamine	121-44-8
1,4-Benzenediamine, N1-(1-methylethyl)-N4-phenyl-	101-72-4

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;	838-88-0
4,4'-Methylendi-o-toluidin	
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
m-Toluidine	108-44-1
p-Toluidine	106-49-0
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.
Group 1	a,a,a,4-Tetrachlorotoluene	5216-25-1
	a,a,a-Trichlorotoluene	98-07-7
	a-chlorotoluene; benzyl chloride	100-44-7
Group 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
	1,2 Dichlorbenzene	95-50-1
	1,2,3 Trichlorobenzene	87-61-6
	1,2,3,4-Tetrachlorobenzene	634-66-2
	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	
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

Colorants with carcinogenic 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

Colorants with allergenic 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
	603-48-5
Basic Violet 3	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

Flame Retardants	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, C14-C17, chlorinated	85535-85-9
Paraffin, C18-C28, chlorinated	85535-86-0
Pentabromodiphenylether (pentaBDE)	32534-81-9
Tetrabromobisphenol A TBBPA	79-94-7
Tetrabromodiphenyl ethers (TetraBDE)	40088-47-9
Tri-(2,3-dibromopropyl)-phosphate TRIS	126-72-7
Triethylenephosphoramidate (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
tetraboron disodium heptaoxide, hydrate	12267-73-1
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" TM , DP, or DPMA)	13560-89-9, 135821- 74-8, 135821-03-3-
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
Heptachloronaphthalene	32241-08-0
Octachloronaphthalene	2234-13-1
Polybrominated naphthalenes (PBNs)	Several
Polybrominated biphenyls (PBBs)	Several

PFAS (ex PFC)	Classification	CAS – No.
Perfluorobutanoic acid (PFBA)	375-22-4	
Perfloropantanoic acid (PFPeA)	2706-90-3	
Perfluorohexanoic acid (PFHxA)	307-24-4	
Perfluoroheptanoic acid (PFHpA)	375-85-9	
Perfluorooctanoic acid (PFOA)	335-67-1	
Perfluorononanoic acid (PFNA)	375-95-1	
perflorodecanoic acid (PFDA)	335-76-2	
Perfloroundecanoic acid (PFUnA)	2058-94-8	
perfluorododecanoic acid (PFDoA)	307-55-1	
perfluorotridecanoic acid (PFTrA)	72629-94-8	
perfluorotetradecanoic acid (PFTeA)	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	3825-26-1	
Perfluorobutane sulfonic acid (PFBS)	375-73-5	
perfluoroheptane sulfonic acid (PFHpS)	375-92-8	
perfluorodecane sulfonic acid (PFDS)	335-77-3	
Perfluorooctane sulfonates PFOS	1763-23-1 / 2795- 39-3	
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (1H, 1H, 2H, 2H-PFOS)	27619-97-2	
Perfluorooctanesulfonamide (PFOSA)	754-91-6	
perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)	172155-07-6	
6:2 FTOH, Perfluorohexylethanol	647-42-7	
8:2 FTOH, Perfluorooctylethanol	678-39-7	
1H, 1H, 2H, 2H-perfluorododecane -1-ol (10:2 FTOH)	865-86-1	
n-Methyl-Perfluorooctanesulfonamide (N-Me-FOSA)	31506-32-8	
n-Ethyl-Perfluorooctanesulfonamide (N-Et-FOSA)	4151-50-2	
n-Methyl-Perfluorooctanesulfonamide (N-Me-FOSE)	24448-09-7	
n-Ethyl-Perfluorooctanesulfonamidoethanol (N-Et- FOSE)	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 NH ₄ -salt (PFDS-NH ₄)	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)	27905-45-9	
1H, 1H, 2H, 2H-perfluorododecylacrylate (10:2 FTA)	17741-60-5	
Perfluorobutanesulfonamide F(CF ₂) ₄ SO ₂ NH ₂		
perfluoro-1-pctanesulfonyl fluoride (POSF)	307-35-7	
8:2 Fluorotelomer methacrylate (8:2 FTMAC)	1996-88-9	
8:2 Fluorotelomer stearate monoester (8:2 FTS)	-	
8:2 Fluorotelomer sitrate triester	-	
Pentadecafluorooctanoyl fluoride	335-66-0	
Pentadecafluorooctanoic acid methyl ester	376-27-2	
Pentadecafluorooctanoic acid ethyl ester	3108-24-5	
Na-PFOA 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-deca-fluorooctanoic acid, sodium salt	335-95-5	
K-PFOA 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-deca-fluorooctanoic acid, potassium salt	2395-00-8	
2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-deca-fluorooctanoic acid, silver salt	335-93-3	
Perfluorooctanoyl fluoride	335-06-0	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4	
Lithium perfluorooctane sulfonate	29457-72-5	
Ammonium perfluorooctane sulfonate	29081-56-9	
Bis2(hydroxyethyl)ammonium perfluorooctane sulfonate	70225-14-8	
Tetraethylammonium heptadecafluorooctane sulfonate	56773-42-3	
1-decanaminium, N-decyl-N, N dimethyl- 0,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate	251099-16-8	
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid	13252-13-6	
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid salts and acyl halides (HPFO-DA-X, X = K)	67118-55-2	

Isocyanates	CAS – No.
4,4'-methylenedicyclohexyl diisocyanate	5124-30-1
Diphenylmethan-2,2-di-isocyanate (2,2-MDI)	232418
Diphenylmethan-2,4-di-isocyanate (2,4-MDI)	5873-54-1
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
Toluene diisocyanate 2,6-TDI	91-08-7
m-tolyldiene 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-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
N-Nitroso-di-ethanolamine	1116-54-7

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

Pesticides	CAS – No.
Heptachlor epoxide	1024-57-3
Heptachlorine	76-44-8
2-2(2,4,5-Trichlorophenoxy)propionice acid, salts and compounds	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

Pesticides	CAS – No.
Fenchlorphos	299-84-3
Fenitrothion	122-14-5
Fenvalerate	51630-58-1
Flumehttrin	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
Thiaclopid	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
Diffubenzuron	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

Pesticides	CAS – No.
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.
Group A	Benzo (a) pyrene **	50-32-8
	Benzo (e) pyrene **	192-97-2
	Benzo (b) fluoranthene **	205-99-2
	Benzo (j) fluoranthene **	205-82-3

Polyaromatic Hydrocarbons (PAHs)		CAS – No.
	Chrysene **	218-01-9
	Benzo (k) fluoranthene **	207-08-9
	Benzo (a) anthracene **	56-55-3
	Dibenzo (a,h) anthracene	53-70-3
Group B	Benzo (g,h,i) perylene **	191-24-2
	Acenaphtene	83-32-9
	Acenaphtylene	208-96-8
	Anthracene	120-12-7
	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
	Xylene-p	108-38-3
	Xylene-o	95-47-6
	Xylene-m	106-42-3

Solvents	CAS – No.
Benzene	71-43-2
Dichloromethane	75-09-2
Formamide	75-12-7
N,N-Dimethylacetamide (DMAc)	127-19-5
N-Methylpyrrolidone (NMP)	872-50-4
Tetrachloroethylene (Perchloroethylene)	127-18-4
Trichloroethylene	79-01-6
N.ethyl-2-pyrrolidone (NEP)	2687-91-4
N,N-dimethylformamide (DMFa)	68-12-2
Toluene	108-88-3
Xylene, all isomers	1330-20-7

Tin-organic compounds		CAS – No.
Group A	Tributyltin TBT	36643-28-4 56573-85-4
	Tetrabutyltin TeBT	1461-25-2
	Tetraoctyltin TeOT	3590-84-9
	Tricyclohexyltin TricycloHT	several
	Dimethyltin compounds (DMT)	several
	Triphenyltin TPhT	668-34-8
	Trioctyltin compounds (TOT)	several
	Trimethyltin compounds (TMT)	several
	Tripropyltin compounds (TPT)	several
Group B	Diocetyl tin DOT	15231-44-4
	Monobutyltin MBT	78763-54-9
	Dibutyltin DBT	14488-53-0
	Monophenyltin (MPHT)	several
	Dipropyltin compounds (DPT)	Several
Group C	Tetraethyltin (TeET)	several
	Monomethyltin compounds (MMT)	several
	Monooctyltin MOT	several
	diphenyltin compounds (DPhT)	several

UV stabilizers	CAS
UV-320 2-benzotriazol-2-yl-4,6-di-tert-butylphenol	3846-71-7
UV-327 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol	3864-99-1
UV-328 2-(2H-benzotriazol-2-yl)-4,6bis(1,1 dimethylpropyl)phenol	25973-55-1
UV-350 2-(2H-Benzotriazol-2-yl)-4-(tert-butyl)-6-(secbutyl) phenol	36437-37-3

ANNEX 2 TESTING ACTIVITY

Verifying compliance with the Oberalp RSL is a fundamental part of the Chemical Management process 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 the use of improved chemistry in their products, on existing certifications and material test reports.

The supplier can use this short guideline for its chemical testing activity.

TESTING MATRIX - EXPLANATION

The Oberalp testing matrix groups all the Chemical requirements of the Oberalp Chemical Policy: the parameters are divided in:

- Testing strongly recommended
- Testing recommended

This selection is done using the Oberalp's risk assessment and it helps the supplier to focus its testing activity on relevant materials and substances.

COMPOSITE TEST RULES

Some substances can be tested by a composite procedure, i.e., laboratories may group the samples and analyze them together. They can mate only the same material types (e.g. metallic parts with metallic parts, leather with leather) and these rules are applicable only for chemical tests.

A cross mix is allowed only with written approval of Oberalp Group.

The rules are as follows:

Sample grouping: made by material

N sample per composite: up to 3

Substances that may be tested with the composite:

Arylamines, Ammine, Quinoline, Chlorinated Phenols, Chlorinated Benzenes and Toluenes, APs and APEOs, Plasticizers (phthalates) Lead, SCCP, Cadmium (tot), Formaldehyde, Solvent, PAH, Isocyanates, quinoline, OPP, UV stabilizer

Substances that may not be tested with the composite:

Organotin compounds, PFCs, Flame retardants, Chromium VI, Nickel release, DMF, Formaldehyde for baby (0-3y), pH, pesticides, VCM, Extractable Heavy metals, N-Nitrosamine, pH, pesticides, bisphenol A, colorants with carcinogenic potential, colorants with allergenic potential, colorants banned for other reasons, isocyanates, styrene

TEST REPORT FORMAT

Oberalp Group can accept test reports provided by the suppliers, provided that the document includes the following information:

PART 1: samples description, supplier and applicant information

PART 2: samples picture

PART 3: materials list: in case of final product, a list of all the parts

PART 4: test summary with the indication of the tested parameters, parts involved and the result (PASS, FAIL).

PART 5: analysis details. For every test, the laboratory indicates the method applied, the samples tested, the results and a reference to the Oberalp requirements.

Oberalp will accept only tests performed using the Oberalp RSL methods and released by third party laboratories certified ISO/IEC 17025

MATERIAL SAMPLING

General rule: if one material is made by the same supplier & color but in different shapes, the supplier may test only one article.

TRIMS

Metallic Parts: if the metallic trim has different size and shape but the composition & supplier are the same, the supplier may test only one article for each style.

The sample must be tested for all the Mandatory Substances. In case of metal trims made by same material but with different parts, the supplier can test only one of them, preferably the parts with the higher surface.

Enamel finishing: the supplier needs to conduct the Lead coating testing based on the table below. The base metallic material shall be tested as Metal Part.

Example: one metallic buckle has three different sizes: the supplier will test only one size and inform that it can cover the other codes.

Leather Trims: if the supplier/Tannery and the material are the same, the darkest color will be tested for the leather package. The other colors will be tested for the reduced package.

Plastic Buttons: the trim supplier must test the trims using the “Plastic Part” package following the indications on the table below.

Type of supplier	Finishing complexity	Color	Remarks
Existing Trims Supplier	≤ 20	4	4 Base color (CMYK)
	≥ 20	10	4 Base color (CMYK) + 6 additional requested color
New Trims Supplier	1st step	4	4 Base color (CMYK)
	If 1st step test fail	10	4 Base color (CMYK) + 6 additional requested color

LEATHER

If one leather has different colors, the supplier must test the darkest for the leather full package (natural or patent/laminated) and the other colors will be tested for the reduced package (see the Annex 4). If the leather has only light colors, the supplier will select the one with the highest orders for the full package and the others will be tested for reduced package.


The supplier shall test each leather material once per season. For the choice of full or reduced package for light-coloured materials, the supplier shall pick the colour which has the biggest quantities in each bulk order of the season.


Example 1: one patent leather has three colors: red, blue and black; the black leather will be tested for the full package “patent/laminated leather”, the blue and the red will be tested for the reduced package.

Example 2: one patent leather has two colors: beige and white. The white has the order with higher quantity: this color will be tested for full package “patent/laminated leather”, the beige color will be tested for the reduced package.

ANNEX 3 TESTING MATRIX – DETAILS

ENGLISH VERSION

 Testing matrix 2.0	METHOD	TEXTILE COATED OR PRINTED	WITHOUT COATING	RECYCLED TEXTILE	ORGANIC TEXTILE	PATENT/LAMINATED	LEATHER WITHOUT COATING	PLASTIC PART	METALLIC PART
Azo Dyes & Its Arylamine Salts	leather ISO 17234:1-2 textile EN 14362- 1&3	•	•	•	•	•	•		
Amines	All material: Extraction with MeOH // GC-MS	v	v	v		v	v		
Quinoline	DIN 54231	•	•	•	•				
Chlorinated Phenols	textile UNI 11057 leather ISO 17070	•	•	•	•	•	•		
Chlorinated Benzenes And Toluenes	DIN EN 17137	v	v					v	
Organotin Compounds	Textile: ISO 22744-1 Non-Textile: ISO/TS 16179	•	•	•	•	•	•	•	
Alkylphenols (Aps) And Alkylphenoethoxylates (Apeos)	Leather: EN ISO 18218-1 APEO / ISO 18218-2 AP Textile ISO 18254-1/ AP ISO 21084	•	•	•	•	•	•		
Plasticizers (Phthalates)	plastic part: CPSC-CH-C1001-09.4 textile: ISO 14389 leather: ISO 16181	•				•		•	
PFAS	leather:-ISO 23702-1 textiles: prEN 17681-1 all materials: total fluorine EN 14582 or ASTM D7359	•*	•*	•*		•*		•*	
Flame Retardants	ISO 17881-1 and 2	v	v	v	v			v	
UV Stabilizer	ISO 24040 THF extraction and GC/MS detection	v	v	v	v			v	
Short Chain Chlorinated Paraffins C10-C13	Combined CADS/ISO 18219:2015 method V1:06/17 (extraction ISO 18219 and analysis by GC/NCI/MS)	v				v		v	
CADMIUM (Total)	textile EN 16711-1 plastic: EN 1122 ISO 17072-2 Leather	•				•		•	v
Chromium Vi	leather: ISO 17075 -2 (Ageing ISO 10195: A2 condition) textile: EN 16711-2	•	•	•	•	•	•		
Nickel Release	Coated: EN 12472 + EN 1811 not coated: EN 1811								•
DIMETHYLFUMARATE (DMF)	ISO 16186	v	v	v	v	v	v	v	
Formaldehyde	textile: ISO 14184-1 leather: ISO 17226-1	•	•	•	•	•	•		
pH	leather: ISO 4045 textile and other materials: ISO 3071	•	•	•	•	•	•		
Pesticides	textile: U.S. EPA Method 8081b U.S. EPA Method 8151a leather: ISO 22517		v		•		v		
Acetophenone and 2 -phenyl 2- propanol	Extraction by Methanol, GC-MS							E	
Bisphenol A Bisphenol S Bisphenol B Bisphenol AF Bisphenol F	1 g sample/20 ml THF, sonication for 60 minutes at 60° C, analysis with LC/M			•				v	
Lead (total)	metallic substrate: CPSC-CH-E1001-08.3 not metallic substrate: CPSC-CH-E1002-08.3 surface coating: CPSC-CH-E1003-09.1	•				•		•	•
PAH	AfPS GS 2019:01 PAK	v		v		v		• u	
Colorants with carcinogenic potential	DIN 54231	•	•	•	•				
Colorants with allergenic potential	DIN 54231	•	•	•	•				
Colorants banned for other reasons	DIN 54231	•	•	•	•				

 <u>Testing matrix 2.0</u>	METHOD	TEXTILE COATED OR PRINTED	WITHOUT COATING	RECYCLED TEXTILE	ORGANIC TEXTILE	PATENT/LAMINATED	LEATHER WITHOUT COATING	PLASTIC PART	METALLIC PART
N - Nitrosamine	EN19577							● ou	
Ortho-Phenylphenol (OPP)	DIN 50009	v	v	v	v	v	v		
solvent	CEN ISO/TS 16189	●			●			● ou	
Isocyanates	DIN EN 13130-8	● PU				● PU		● PU	
styrene	Extraction by Methanol, GC-MS							● SBR	
Vinyl Chloride Monomer Content(Vcm)	EN ISO 6401							● P VC	
Heavy Metals									
Cobalt	textile EN 16711-2 leather ISO 17072-1	v	v	v	●				
Copper		v	v	v	●				
Chromium		v	●	●	●				
Mercury		●	●	●	●				
Arsenic		●	●	●	●				
Lead		●	●	●	●	v	v		
Nickel		●	●	●	●	v	v		
Cadmium		●	●	●	●	v	v		
Antimony		v	v	v	●	v	v		
Barium		v	v	v	●				

V: Testing recommended

E = only for EVA


● Testing strongly recommended


●PU only for PU

●_{SBR} SBR plastic only

●ou for outsole

●* for waterproof material

 Testing matrix 2.0	METODO	TESSUTO COATED O STAMPATO	TESSUTO SENZA COATING	TESSUTO RICICLATO	TESSUTO ORGANICO	PELLE CON COATING O LAMINATA	PELLE SENZA COATING	PARTI IN PLASTICA	PARTI METALLICHE
COLORANTI AZOICI & LORO ARILAMMINE	PELLE ISO 17234:1-2 TESSUTO EN 14362- 1&3	•	•	•	•	•	•		
AMMINE	All material: Extraction with MeOH // GC-MS	v	v	v		v	v		
CHINOLINA	DIN 54231	•	•	•	•				
FENOLI CLORURATI	TESSUTO UNI 11057 PELLE ISO 17070	•	•	•	•	•	•		
BENZENI E TOLUENI CLORURATI	DIN EN 17137	v	v					v	
COMPOSTI ORGANOSTANNICI	TESSUTO: ISO 22744-1 Non-TESSUTO: ISO/TS 16179	•	•	•	•	•	•	•	
ALCHILFENOLI (APs) and AICHLFENOLI ETOSSILATI (APEOs)	PELLE: EN ISO 18218-1 APEO / ISO 18218-2 AP TESSUTO ISO 18254-1/ AP ISO 21084	•	•	•	•	•	•		
PLASTICIZZANTI (FTALATI)	PLASTICA part: CPSC-CH-C1001-09.4 PELLE: ISO 16181 TESSUTO: ISO 14389	•				•		•	
PFAS	PELLE: ISO 23702-1 TESSUTOs: prEN 17681-1 tutti i materiali: Fluoro totale EN 14582/ASTM D7359	•*	•*	•*		•*		•*	
RITARDANDI DI FIAMMA	ISO 17881-1 and 2	v	v	v	v			v	
STABILIZZANTI UV	ISO 24040 THF extraction and GC/MS detection	v	v	v	v			v	
PARAFFINE CLORURATE A CATENA CORTA C10-C13	Combined CADS/ISO 18219:2015 method V1:06/17 (extraction ISO 18219 and analysis by GC/NCl/MS)	v				v		v	
CADMIO (TOTALE)	Tessuto EN 16711-1 Plastica: EN 1122 Pelle: ISO 17072-2	•				•		•	v
CROMO VI	PELLE: ISO 17075 -2 (Ageing ISO 10195: 80°C 10% HR) TESSUTO: EN 16711-2	•	•	•	•	•	•		
NICHEL - RILASCIATO	Coated: EN 12472 + EN 1811 not coated: EN 1811								•
DIMETILFUMARATO	ISO 16186	v	v	v	v	v	v	v	
FORMALDEIDE	TESSUTO: ISO 14184-1 PELLE: ISO 17226-1	•	•	•	•	•	•		
pH	PELLE: ISO 4045 TESSUTO and other materials: ISO 3071	•	•	•	•	•	•		
PESTICIDI	TESSUTO: U.S. EPA Method 8081b U.S. EPA Method 8151a PELLE: ISO 22517		v		•		v		
Acetophenone and 2 -phenyl 2-propanol	estrazione con MeOH, GC-MS							E	
Bisphenol A Bisphenol S Bisphenol B Bisphenol AF Bisphenol F	1 g sample/20 ml THF, sonication for 60 minutes at 60° C, analysis with LC/M			•				v	
PIOMBO (TOTALE)	metallic substrate: CPSC-CH-E1001-08.3 not metallic substrate: CPSC-CH-E1002-08.3 surface coating: CPSC-CH-E1003-09.1	•				•		•	•
PAH	AfPS GS 2019:01 PAK	v		v		v		• o u	

 Testing matrix 2.0	METODO	TESSUTO COATED O STAMPATO	TESSUTO SENZA COATING	TESSUTO RICICLATO	TESSUTO ORGANICO	PELLE CON COATING O LAMINATA	PELLE SENZA COATING	PARTI IN PLASTICA	PARTI METALLICHE
Coloranti Cancerogeni	DIN 54231	•	•	•	•				
Coloranti Allergenici	DIN 54231	•	•	•	•				
Coloranti Banditi Per Altre Ragioni	DIN 54231	•	•	•	•				
N - NITROSAMINE	EN 19577							•ou	
ORTOFENILFENOLI	DIN 50009	v	v	v	v	v	v		
SOLVENTI	CEN ISO/TS 16189	•			•			•ou	
ISOCIANATI	DIN EN 13130-8	•PU				•PU		•PU	
STIRENE	Extraction by Methanol, GC-MS							•SBR	
VINYL CHLORIDE MONOMER CONTENT(VCM)	EN ISO 6401							•PVC	
METALLI PESANTI - RILASCIATI									
COBALTO	textile EN 16711-2 leather ISO 17072-1	v	v	v	•				
RAME		v	v	v	•				
CROMO		v	•	•	•				
MERCURIO		•	•	•	•				
ARSENICO		•	•	•	•				
PIOMBO		•	•	•	•	v	v		
NICHEL		•	•	•	•	v	v		
CADMIO		•	•	•	•	v	v		
ANTIMONIO		v	v	v	•	v	v		
BARIO		v	v	v	•				

V: Test Raccomandato

E =solo per EVA

• Test Altamente Raccomandato


•_{PU} only for PU

•SBR SBR PLASTICA only

•ou per suola

•* materiali waterproof

 Testing matrix 2.0	METHOD	有涂层/处理的纺织品 TEXTILE COATED OR PRINTED	天然人造纤维	再生纺织品	有机织物 ORGANIC TEXTILE	漆皮/层压皮 PAINT/LAMINATED LEATHER	无涂层皮革 LEATHER WITHOUT COATING	塑料 PLASTIC PART	金属 METALLIC PART
禁用偶氮 Azo Dyes & its Arylamine salts	leather ISO 17234:1-2 textile EN 14362- 1&3	●	●	●	●	●	●		
胺类 amines	All material: Extraction with MeOH // GC-MS	V	V	V		V	V		
喹啉 quinoline	DIN 54231	●	●	●	●				
氯化苯酚 Chlorinated Phenols	textile UNI 11057 leather ISO 17070	●	●	●	●	●	●		
氯化苯和甲苯 Chlorinated Benzenes and Toluenes	DIN EN 17137	V	V					V	
有机锡 Organotin compounds	Textile: ISO 22744-1 Non-Textile: ISO/TS 16179	●	●	●	●	●	●	●	
壬基酚, 辛基酚, 壬基酚乙基氧化物, 辛基酚乙基氧化物 Alkylphenols (APs) and Alkylphenoethoxylates (APEOs)	Leather: EN ISO 18218-1 APEO / ISO 18218-2 AP Textile ISO 18254-1/ AP ISO 21084	●	●	●	●	●	●		
邻苯二甲酸酯 PLASTICIZERS (PHTHALATES)	plastic part: CPSC-CH-C1001-09.4 textile: ISO 14389 leather: ISO 16181	●				●		●	
全氟磺酸 PFAS	leather:-ISO 23702-1 textiles: prEN 17681-1 all materials: total fluorine EN 14582 or ASTM D7359	●*	●*	●*		●*		●*	
阻燃剂 Flame retardants	ISO 17881-1 and 2	V	V	V	V			V	
紫外线稳定剂 UV stabilizer	ISO 24040 THF extraction and GC/MS detection	V	V	V	V			V	
短链氯化石蜡 SCCP C10-C13	Combined CADS/ISO 18219:2015 method V1:06/17 (extraction ISO 18219 and analysis by GC/NCI/MS)	V				V		V	
镉 (全部的) CADMIUM (total)	textile EN 16711-1 plastic: EN 1122 Leather ISO 17072-2	●				●		●	V
六价铬 Chromium VI	leather: ISO 17075 -2 (Ageing ISO 10195: A2 condition) textile: EN 16711-2	●	●	●	●	●	●		
镍释放量 Nickel release	Coated: EN 12472 + EN 1811 not coated: EN 1811								●
富马酸二甲酯 DIMETHYLFUMARATE (DMF)	ISO 16186	V	V	V	V	V	V	V	
甲醛 FORMALDEHYDE	textile: ISO 14184-1 leather: ISO 17226-1	●	●	●	●	●	●		
酸碱度 pH	leather: ISO 4045 textile and other materials: ISO 3071	●	●	●	●	●	●		
杀虫剂 PESTICIDES	textile: U.S. EPA Method 8081b U.S. EPA Method 8151a leather: ISO 22517		V		●		V		
苯乙酮和2-苯基2-丙醇 Acetophenone and 2-phenyl 2-propanol	Extraction by Methanol, GC-MS								E
双酚 Bisphenol A 双酚 Bisphenol S 双酚 Bisphenol B 双酚 Bisphenol AF 双酚 Bisphenol F	1 g sample/20 ml THF, sonication for 60 minutes at 60° C, analysis with LC/M			●				V	
总铅 LEAD (total)	metallic substrate: CPSC-CH-E1001-08.3 not metallic substrate: CPSC-CH-E1002-08.3 surface coating: CPSC-CH-E1003-09.1	●				●		●	●
多环芳香烃化合物 PAH	AfPS GS 2019:01 PAK	V		V		V		● O U	

 Testing matrix 2.0	METHOD	有涂层/处理的纺织品 TEXTILE WITH LAYER COATING	天然人造纤维 RECYCLED TEXTILE	再生纺织品 RECYCLED TEXTILE	有机织物 ORGANIC TEXTILE	漆皮/层压皮 PAINTED/LAMINATED LEATHER	无涂层皮革 LEATHER WITHOUT COATING	塑料 PLASTIC PART	金属 METALLIC PART
具有致癌潜力的着色剂 Colorants with carcinogenic potential	DIN 54231	•	•	•	•				
具有潜在致敏性的着色剂 Colorants with allergenic potential	DIN 54231	•	•	•	•				
因其他原因禁用的着色剂 Colorants banned for other reasons	DIN 54231	•	•	•	•				
N-亚硝酸 N - Nitrosamine	EN19577							•OU	
邻苯基苯酚 Ortho-phenylphenol (OPP)	DIN 50009	V	V	V	V	V	V		
溶剂 solvent	CEN ISO/TS 16189	•			•			•OU	
异氰酸酯 ISOCYANATES	DIN EN 13130-8	•PU				•PU		•PU	
苯乙烯 styrene	Extraction by Methanol, GC-MS							•SBR	
氯乙烯单体含量 (VCM)	EN ISO 6401							•PVC	
金属提取 HEAVY METALS									
钴 COBALT	textile EN 16711-2 leather ISO 17072-1	V	V	V	•				
铜 COPPER		V	V	V	•				
铬 CHROMIUM		V	•	•	•				
汞 MERCURY		•	•	•	•				
砒 ARSENIC		•	•	•	•				
铅 LEAD		•	•	•	•	V	V		
镍释放 NICKEL		•	•	•	•	V	V		
镉 CADMIUM		•	•	•	•	V	V		
锑 ANTIMONY		V	V	V	•	V	V		
钡 BARIUM		V	V	V	•				

- V: Testing recommended
- Testing strongly recommended
 - PU only for PU
 - SBR SBR plastic only
 - ou for outsole
 - * for waterproof material

E =solo per EVA