

Sandqvist's chemical policy

- restricted substances list (RSL)

and requirements on chemical use in production (MRSL)

Version 3.0, December 2022

Sandqvist's chemical requirements – for products as well as manufacturing processes

Sandqvist wants to contribute and influence society towards sustainable development and minimizing the environmental impact of our production. To meet the high environmental ambition of Sandqvist, we have strict requirements on both chemicals that can remain in the end product (product related chemicals), but also on chemicals used in the production (process chemicals).

The requirements on product related chemicals are specified in the Restricted Substances List (RSL), and the process chemicals are specified in the Manufacturing Restricted Substances List (MRSL) described below. Furthermore, Sandqvist has a list of Materials and substances of specific concern for Sandqvist specifying high risk substances that are banned from use in the production of Sandqvist's products.

In addition to following our RSL and our MRSL, we require that our suppliers are updated on, and in compliance with, the EU legislation as well as any local or national laws applicable (see the section Legal Requirements below).

Our requirements are in line with best practices within the textile industry and legislation in our sales countries in and outside the EU. In case that the legal or voluntary requirements referred to in this document differ, the stricter version should be applied.

Restricted Substances List (RSL)

All products to be delivered to Sandqvist should live up to the requirements of the RSL of the Apparel and Footwear International RSL Management (AFIRM) Working Group. The latest version of the AFIRM RSL is available on the organisation's homepage: www.afirm-group.com. All suppliers of Sandqvist are responsible to be updated on the latest version of the AFIRM RSL.

The AFIRM RSL lists both limits in the finished products, potential uses and testing methods that should be used when testing the materials. On the AFIRM homepage you can also find the *AFIRM Supplier Toolkit* developed to help suppliers implement the RSL.

Manufacturing Restricted Substances List (MRSL)

All chemicals used in the production of Sandqvist's products should follow the *Manufacturing Restricted Substances List* (MRSL) developed by the initiative *Zero Discharge of Hazardous Chemicals* (ZDHC). This list has been developed to facilitate the phase out of hazardous chemicals in production. The MRSL can be found on the ZDHC homepage: www.roadmaptozero.com. Please note that the limits in the MRSL concerns the chemicals used in production, for limit values for the finished products, use the AFIRM RSL referred to above.

The ZDHC homepage provides detailed information on priority substances to help implementation of their MRSL. Several suppliers of textile chemicals also have *positive lists* for the ZDHC requirements, i.e. list of all their chemical products that live up to the requirements of the ZDHC initiative. Examples of chemicals companies now providing positive lists include: Longsheng, Transfar, Huntsman, DyStar, Bozzetto, Jintex, Matex, Ohyoung and RESIL.

Legal Requirements

In addition to following the RSL and the MRSL mentioned previously, we require that all our suppliers are updated on and follow the chemical legislation of the European Union. This entails that our suppliers should be continuously updated and comply with following legislations:

- REACH regulation EC No 1907/2006 including REACH Annex XVII, REACH Annex XIV and REACH Candidate list.
- Stockholm Convention on Persistent Organic Pollutants via (EC) 850/2004 (POPs).
- Biocidal Product Regulation EU No 528/2012.
- EU Directive 94/62/EC for packaging materials.

Substances from the *Candidate List of Substances of Very High Concern for Authorisation* (REACH Candidate list) published by the European Chemicals Agency (ECHA) should not be used in production and should not be present in any products in a higher concentration than 1000 ppm (unless stricter requirements are listed in other parts of this chemical policy).

We require that all our suppliers are updated on the legal requirements of the Safe Drinking Water and Toxic Enforcement Act of 1986 (a law in California, USA), also known as Proposition 65. This means that the chemical content in all products, or any part of a product, should be manufactured in a way that no warning sign is needed according to the requirements of Proposition 65.

Communicating Sandqvist's chemical policy to all relevant suppliers

Sandqvist requires that our manufacturers make sure that their suppliers and subcontractors are informed and comply with the Sandqvist's chemical policy. To make sure this is implemented, suppliers of materials and trimmings as well as subcontractors should sign the Sandqvist's chemical policy. For fabric and trimmings sourced or nominated by Sandqvist, Sandqvist will be responsible to make sure they have signed the RSL. If not sure if a supplier has signed the Sandqvist's chemical policy, contact the Sandqvist Sustainability department through lotta@sandqvist.com.

Materials and substances of specific concern for Sandqvist

On the next page Sandqvist has included a table to guide suppliers in their work with our chemical restrictions. In this table high risk chemicals are listed under headlines showing in what material or processes used by Sandqvist these might be relevant. The chemicals listed in the guidance table on the next page are banned from intentional use in production of Sandqvist's products. All testing should be done according to the standards listed in the latest AFIRM RSL. Upon request, suppliers must provide Sandqvist with test results to confirm compliance with the chemical restrictions.

Abbreviations and explanation to the guidance table

1 ppm (parts per million) = 1 mg/kg

1000 ppm = 0.1% by weight

CMR = Carcinogenic, mutagenic or reproduction toxic

N.D. = Not detectable

Table of Materials and Substances of Specific Concern for Sandqvist

Material / process		Banned Chemicals	Limit value	Comment
Relevant to Sandqvist	General description of material or process	- no intentional use		
Cotton	Dyed cotton cellulosic fibres such as cotton, hemp, flax, viscose etc.	Banned arylamines derived from azo dyes	20 ppm	Limit for each arylamine.
		CMR classified dyestuffs and pigments	N.D.	
Polyester, nylon and Cordura	Dyed polyester, polyamide (e.g. nylon), acetate, triacetate, chlorofibres.	Banned arylamines derived from azo dyes	20 ppm	Limit for each arylamine.
		CMR classified dyestuffs and pigments	N.D.	
		Allergenic disperse dyes and Navy Blue	N.D.	
		Bisphenols	1 ppm	0.1 ppm for individual samples, 1 ppm for composite samples
Leather	Protein fibres and manmade materials such as leather, wool, silk and chromium dyed polyamide	Banned arylamines derived from azo dyes	20 ppm	Limit for each arylamine.
		CMR classified dyestuffs and pigments	N.D.	
		Formaldehyde	16 ppm	
		Chromium VI (Cr ⁺⁶)	3 ppm	
		Chlorophenols	0.5 ppm	Limit for each chlorophenol.
		Allergenic disperse dyes and Navy Blue	N.D.	
		Bisphenols	1 ppm	0.1 ppm for individual samples, 1 ppm for composite samples
		Polycyclic Aromatic Hydrocarbons (PAHs)	1 ppm	1 ppm for each PAH, total 10 ppm.
Foams (polymers)	Spongy material made by trapping air bubbles in a solid. These can be open cell or closed cell.	Bisphenols	1 ppm	0.1 ppm for individual samples, 1 ppm for composite samples
		Chlorinated Paraffins	N.D.	
		Mercury	0.1 ppm	
		Dibutyltin compounds (DBT) + dioctyltin compounds (DOT)	1 ppm	
		Perfluoro octane carboxylic acid (PFOA) and related substances	1 µg/m ² each	
		Perfluoro octane sulfonate (PFOS) and related substances	1 µg/m ² each	
		Polycyclic Aromatic Hydrocarbons (PAHs)	1 ppm	1 ppm for each PAH, total 10 ppm.
		Phthalate esters	500 ppm	500 ppm/phthalate. Total <1000 ppm in the material of interest (e.g. a foam).

		Organic solvents: DMAC & Dimethylformamide (DMFa)	500 ppm	
Metal	Metal (incl. enamel coated), metal accessories/trims	Nickel	0.5 µg/cm ²	Per week
		Lead and lead salts	90 ppm	As a metal in plastic and metallic trims.
		Cadmium and cadmium salts	1 ppm	
Coatings, prints	PVC, Polyurethane (PU) or rubber coatings and prints	PVC	N.D.	
		Phthalate esters	500 ppm	500 ppm/phthalate. Total <1000 ppm in the material of interest (e.g. a print).
		Chlorinated Paraffins	N.D.	
		Lead and lead salts	1 ppm	Should not be present in textiles.
		Cadmium and cadmium salts	1 ppm	Extractable: 0,1 ppm
		Dibutyltin compounds (DBT) + dioctyltin compounds (DOT)	1 ppm	
Treated textile and leather	Oil/dirt/water repellence, breathability, chemical shrink, wrinkle or antistatic treatment	Formaldehyde	16 ppm	
		Perfluoro octane carboxylic acid (PFOA) and related substances	1 µg/m ² each	
		Perfluoro octane sulfonate (PFOS) and related substances	1 µg/m ² each	
		Organic solvents: DMAC & Dimethylformamide (DMFa)	500 ppm	
Storage and transport		Allergenic fungicides (Dimethylfumarate - DMFu)	0,1 ppm	
		Fungicides (PCP, TeCP)	0,5 ppm	
		Permethrin (insecticide)	0.1 ppm	
		Fumigants (Methyl Bromide, Phosphine and Hydrogen cyanide.)	N.D.	
Process chemicals of high concern	Washing, lubricant in spinning, dispersive agents in industrial chemicals, etc.	Alkylphenoxyoxylates (APEO) such as nonylphenoxyoxylates (NPEO) and oktylphenoxyoxylates (OPEO)	100 ppm	Total APs: 10 ppm, APs + APEOs: 100 ppm in total
	Pigment prints, plastic or rubber accessories	Volatile Organic compounds (VOC)	No odour	5 ppm limit for Benzene, Other: 20 ppm each
pH	Textiles		4.0 - 7.5	
	Leather		3.2 - 4.5	